

Channel Islands National Park and Channel Islands National Marine Sanctuary

Submerged Cultural Resources Assessment

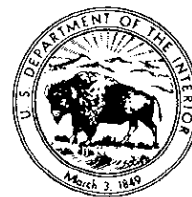
Don P. Morris and James Lima

A stylized illustration in black and white. On the left, a large, intricate silhouette of a coral reef structure extends vertically. In the center, a diver is shown in silhouette, swimming horizontally. Below the diver, a large, dark silhouette of a shipwreck is visible, with several vertical lines representing masts or rigging. To the right of the shipwreck, there are two vertical silhouettes of plants or seaweed. At the bottom right, another diver is shown in silhouette, swimming vertically. The entire illustration is set against a white background.

**CHANNEL ISLANDS NATIONAL PARK
SUBMERGED CULTURAL RESOURCES UNIT
NATIONAL PARK SERVICE**

CHANNEL ISLANDS NATIONAL PARK
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CHANNEL ISLANDS NATIONAL MARINE
SANCTUARY

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SYSTEMWIDE ARCHEOLOGICAL INVENTORY PROGRAM



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SANCTUARY

Submerged Cultural Resources Assessment

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Intermountain Cultural Resource Centers Professional Papers
Number 56

Submerged Cultural Resources Unit
Intermountain Field Area
National Park Service

Santa Fe, New Mexico
1996

Submerged Cultural Resources Unit
Intermountain Cultural Resource Centers
Intermountain Field Area
National Park Service
U.S. Department of the Interior

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FOREWORD

The Channel Islands National Park and National Marine Sanctuary encompass more than a thousand square miles of submerged lands. Close cooperation between the National Park Service (NPS), National Oceanic and Atmospheric Administration (NOAA), U.S. Navy and the State of California have been necessary to the successful management of this diverse marine protected area.

Shipwrecks and other underwater historical sites were soon recognized as major components of the public values needing attention by managers. Scientific diving operations were undertaken to evaluate and protect these sites in association with efforts to document and monitor the area's rich natural resources.

This work by Don P. Morris and James Lima lays a firm foundation for future research and protection of the submerged

cultural resources of the Channel Islands. The authors systematically discuss what's known about the submerged archeological sites from their own field work and that of their colleagues. They then foreshadow the potential for future finds as suggested from archival research.

Morris and Lima have articulately presented an historical and prehistoric context for understanding the maritime archeology of the area and offer managers strategies for nurturing these resources into the next millennium. That, after all, is what parks and sanctuaries are all about.

Daniel J. Lenihan, Chief
Submerged Cultural Resources Unit
National Park Service

ACKNOWLEDGEMENTS

The work reported here has been undertaken primarily by volunteers, including many people working at Channel Islands National Park, who could have found easier things to do than dive on shipwrecks. Very little would have happened without the generous contributions of many people. The participants in the first wreck cruise in 1985, Charles Farabee, Dale Barnett, Jim Loach, Mike Dixon, Art Tracey, Jim Koza, Steve Cottrell, Bill Burke, Beverly Perry, Brian Sutton, Armando Quintero, Martin Mayer, Glen Fuller, and Tom McGrath initiated work on the *Goldenhorn*. Dr. Roger Kelly, Western Regional Office, Superintendent William Ehorn, and Sanctuary Manager Carol Pilsbury supported shipwreck investigations in the beginning, while logistical support and advice came from Gary Davis, Frank Ugolini, Christina Horton, Peggy Broersma, Karen Johnson, Norma Della Betta, Kim Glass, and Audrey Wagner. Superintendent C. Mack Shaver and Chief of Resources Management Katherine Faulkner have not only supported maritime investigations, but have also gotten wet and actively participated in field work. Sanctuary Managers Steve Jameson and John Miller, along with Todd Jacobs, have enthusiastically participated in many phases of field work. Captain John Carpenter, Executive Officer Kathy Andreen, Lieutenant Theresa Otsubo, and Jim Anthony of the *Fairweather* supported early remote sensing in the Park and Sanctuary waters.

Channel Islands staff members who have assisted with field work include Dan Richards, Don Unser, Tom Cox, Stacy Kim, James

Martin, David Stoltz, Ed Elson, Jim Hutton, Yvonne Menard, Mark Senning, Corky Farley, Robert Danno, Ian Williams, Diane Green, Kim Slinninger, Earl Whetsall, Dave Forcucci, Jack Fitzgerald, Craig Johnson, Marc Linder, Paul Shattuck, and Kym Leggett.

Divers and archeologists don't visit wrecks without boats and the support of those who run them. Charles Bird, Randy Bidwell, Pat Given, John Provo, and Diane Richardson have put in many hours to pull off successful cruises. Dwight Willey, in particular, cranked up the *Sea Ranger* at 4 A.M. one June morning, resulting in the first Park Service dive on the *Cuba* in the demanding waters off Point Bennett.

Civilian volunteers who have contributed to the work include Mark Norder, who has spearheaded computerization of some of the wreck maps, Patrick Smith, and Robert Schwemmer, who located extremely important information on several vessels. Harley Martin, Bruce Hector, Steve Barsky, Shirley Bowersmith, William Grimes, Matthew Russell, Adriane Askins, and Michael Marzolla all assisted with often arduous diving tasks. The members of Channel Islands Marine Archeological Resources (CMAR) have recently provided support and inspiration, particularly in accomplishing beach surveys throughout the park.

Michael Von Alvensleben and Gerald Clouser of Santa Barbara City College spent a memorable, and very rough, week scanning key localities for wreck scatters using their institution's remote operated vehicles (ROVs).

The senior author delayed his contribution to maritime studies until late in his career and has benefited enormously from the assistance generously provided by Dan Lenihan, Larry Murphy, Michael Eng, James Bradford, Larry Nordby, Ken Vrana, Toni Carrell, and Jerry Livingston of the Submerged Cultural Resources Unit, Santa Fe, New Mexico. James Delgado, then Maritime Historian, San Francisco National Maritime Museum, gave the senior author helpful hints in handling small boats in surf at Point Reyes and provided a demonstration of expert witness testimony in connection with a court case involving the *Goldenhorn*. He provided the Cost Book for the *Goldenhorn* and directly encouraged the development of this study. Peter Howorth shared his knowledge of the islands and their wrecks in a most generous fashion, as did Fred Gamble.

The staffs of the National Archives Offices in Washington, DC, San Bruno, and Laguna Niguel provided tremendous assistance in obtaining critical records for this project. Dean Painter generously provided the records supporting the story of the "Grey Ghost."

Special thanks go to Jenny Dugan, Dave Bunnell, and Carmen Lombardo, who reported significant wreckage on park beaches, and to Al Fieldson, who walked many miles of beach with the senior author. Reed McCluskey, Island Ranger for San Miguel Island, took several crucial photographs of the wreckage of the *Comet* when it was last exposed in 1984, before an archeologist was assigned to the park.

Dr. William Lee, Director of the Los Angeles Maritime Museum, taught a very important class in maritime archeology at California State University, Long Beach, which resulted in significant contributions by his students George Barksdale, Stephen Forster, William Fouts, Monica Reed, Dan

Wamba, and Stan Whitman. Dr. Sheli Smith read the draft manuscript and made several helpful suggestions.

Archeologist Steven Schwartz, Point Mugu Test Range, provided funds which allowed archival research jointly beneficial to the preparation of this manuscript and the development of a data base for the Point Mugu Missile Test Center. This significantly improved the quality of the archival research presented here.

Jane Kepp edited the manuscript and Frances Day prepared the manuscript for publication. They have our heartfelt thanks for shaping up the rough manuscript we sent them.

Dr. Sheli Smith, Jack Hunter, and C. Patrick Labadie gave us many thoughtful comments in their peer reviews of this publication.

To everyone mentioned above, and to anyone we may have inadvertently omitted, we extend our thanks for their help in preparing this study. Errors and omissions in this work are the sole responsibility of the authors.

Don P. Morris
Archeologist

Professor John Woolley of the Ocean and Coastal Policy Center, Marine Science Institute at the University of California at Santa Barbara (UCSB) encouraged and supported the efforts of then-UCSB students Jim Lima and Matthew Russell to assemble data on area shipwrecks in conjunction with the effort just getting underway at the park. These cooperative efforts provided much of the initial information on vessels lost in the

park and refined research techniques used in gathering much of the data for this report.

Submerged cultural resource protection is an intergovernmental undertaking. Peter Pelkofer and Kirk Walker of the California State Lands Commission have created a shipwreck protection program and generously shared all available information from their shipwreck data base with us. John Foster at the California Department of Parks and Recreation provided guidance on other resources that contributed to our research.

This report could not have been completed without cooperation and encouragement from the staffs of several archives. The staff of the Government Publication Section of the UCSB library gave the junior author of this report unlimited access to the closed stacks while assembling data on vessel losses from the merchant vessels of the United States directories. In addition, the collections and archives of the following institutions and the patient guidance and warm hospitality of many staffers were critical in assembling data for this report: Long Beach public library, University of California at Los Angeles library, Los Angeles Maritime Museum, Los Angeles Marine Exchange, Ventura public library, Ventura Historic Society, Oxnard public library, Santa Barbara public library, Santa Barbara Historic Society, Santa Cruz

Island Foundation, Santa Barbara Museum of Natural History, Goleta public library, Goleta Valley Historic Society, Lompoc public library, San Luis Obispo public library, California Polytechnic University at San Luis Obispo, San Luis Obispo Historic Society, Monterey Maritime Museum, San Francisco National Maritime Museum, California State Library at Sacramento. In addition, special thanks goes to the National Archives staff in Washington D.C. for their efforts in locating reports which led to the positive identification of the wreckage of the *Dante Alighieri* at Santa Barbara Island.

Finally, we would be remiss in not taking note of the countless divers, history enthusiasts, park visitors and others that it has been our pleasure to meet with and talk to while engaged in this undertaking and for whom this report is written. They recognize that shipwrecks are indeed a national resource to be shared and enjoyed by all, not by a select few who through the unauthorized recovery of artifacts seek to privatize wrecks and deprive citizens of the common heritage that wrecks represent.

James Lima
Troy State University

CHAPTER I

Introduction

This report gathers together historical and archeological information on vessels that wrecked within the boundaries of Channel Islands National Park and Channel Islands National Marine Sanctuary before 1980, when the two preserves were established off the southern coast of California. It summarizes, as well, a series of archeological investigations of wreck scatters in this area that began in the early 1980s with Dan Lenihan's dives on the *Winfield Scott* and continued after 1985 under the direction of the senior author. The latter work, which located and documented several large wreck scatters, is summarized here for the first time. Although major gaps remain in our knowledge of the shipwrecks and submerged cultural resources, considerably more information is now available to the Channel Islands staff than was known in the mid-1960s, when a request for information about wrecks from a dive group drew the response, "There are no shipwrecks at Anacapa Island."

The first definite location of a wreck in the area under consideration by the National Park Service (NPS) came on August 23, 1981. Dan Lenihan, Chief of the Submerged Cultural Resources Unit, and his wife Barbara confirmed the rumored location of the

Winfield Scott at the request of park staff, who had noticed concentrated diver activity in the area. Additional work took place in 1982 and 1983, when the wreck scatter was the subject of an NPS diver's workshop that produced an elementary map of the wreckage. More importantly, this basic knowledge enabled the park to provide a measure of protection to the ship's wreckage.

A literature survey commissioned by Channel Islands National Marine Sanctuary and funded by the National Oceanic and Atmospheric Administration (NOAA) (Howorth and Hudson 1985) provided a beginning point for the current investigations. Howorth and Hudson's report encapsulated firsthand knowledge of the area's wrecks by one of the better informed modern boat captains active in the Channel Islands.

Our fieldwork began when the sanctuary obtained the services of the NOAA hydrographic vessel *Fairweather* for a week in April 1985. We scanned a number of potential wreck sites around the islands in a series of magnetometer and side-scan sonar searches of likely areas indicated by Howorth and Hudson. (This cruise of the *Fairweather* was the second collaboration between NPS and NOAA to detect and research submerged

resources.) Unfortunately, the principal finding of the project was that side-scan sonar was not an effective search tool in the thick kelp and rough, uneven bottom characteristic of the most interesting potential wreck areas.

Later that summer, a week-long cruise put NPS divers on the wrecks of two ships, the *Goldenhorn* and the *Aggi*, and an airplane near Gull Island. This study was followed by two week-long saltwater workshops that mapped the *Goldenhorn* and began a reconnaissance of the *Aggi*. All the work in 1985 received substantial support from NPS's Submerged Cultural Resources Unit in Santa Fe, New Mexico. Concurrently, Steve Haller and Roger Kelly (1987) and James Delgado of the San Francisco National Maritime Museum provided additional information and documentation from primary archives and sources in San Francisco. Their work laid the basis for historical understanding of the ships.

Wreck cruises during succeeding years located and mapped the *Cuba*, conducted additional mapping of the *Aggi*, and carried out investigations at various other locations, laying the foundation for a long-term monitoring program. During this period, shipwreck investigations began to include wreckage on the beaches and in the intertidal zone of the islands, as well as systematic examination of local newspapers.

Of great value to this report were the efforts of students in the first class in maritime archeology at California State University, Long Beach, under the direction of William Lee. These students provided valuable leads to documentation of many wrecks within the study area, clearly demonstrating the need for further examination of primary wreck documentation.

In 1992, the junior author, who had been a volunteer diver for several seasons, was

funded by the U.S. Navy to do additional work in the Point Mugu Test Range, which includes nearly all of Channel Islands National Park. He focused on record sources in southern California and brought documentation on more than 40 additional vessels into this report.

By this point in the study, the authors were attempting to examine every edition of *Merchant Vessels of the United States* to obtain wreck dates and locations. We secured further information from newspaper accounts and ship logs, certificates of enrollment, wreck reports, and other documents on deposit at the National Archives and other repositories. This material has been copied, assembled, and filed at Channel Islands National Park, where key information has been assembled into a dBase III file.

It had become clear by this time that much of the secondary literature on southern California shipwrecks was inaccurate. As a result, citations in this report are usually from primary, or at least from contemporary, sources, to avoid perpetuation of errors. Several vessels that lie outside our study area are discussed simply because they have been listed as island wrecks in the secondary sources. This study gives evidence indicating otherwise.

The fieldwork for this study, ideally preceded by careful documentary searches, employed very basic techniques. Local knowledge and historical photographs proved more useful than magnetometers and side-scan sonar arrays, which were often thwarted by kelp and other environmental factors. Manual mapping, photography, and videotaping were the principal means of documenting the wreck scatters reported here. A great deal of material has been found on the beaches and in the intertidal areas of the park islands and has

been reported by various archeological projects and by park employees engaged in other operations.

Nearly all the fieldwork was accomplished by volunteers, who worked faithfully and diligently, often in conditions ranging from poor to rotten, to map and photograph vessel remains. The results of their work are presented in sections that discuss the shipwrecks of the park in terms of the major type of trade the vessel conducted.

Nearly all previous studies of shipwrecks for the park have set some sort of lower size limit, such as 50 feet long or 50 tons, and thus do not consider the smaller vessels of the area. We adopted no lower limit for at least two reasons. First, adopting an arbitrary limit says that historical (i.e., important) events or processes did not occur on small craft. Such is not the case. Second, watercraft are simply artifacts--tools used to accomplish desired results. Through historical and archeological study of the artifact, we attempt to understand the people who made the decisions and guided the tools, as well as the environmental and social milieus in which they lived. Small craft can be every bit as helpful in this endeavor as big ones. Seal hunters, for example, used small boats, but with large impacts, which is why historical studies of sealing and its associated boats are worthwhile.

Nevertheless, this study is undeniably biased in favor of larger ships because they are, after all, more conspicuous, more prominent in the historical record, and easier to trace. Future fieldwork and historical research should strive to eliminate this bias.

We discuss submerged prehistoric sites only briefly, not because they are unimportant but because the excellent treatment of them by the late Travis Hudson (Howorth and Hudson 1985) is still current. Certainly submerged

sites did exist along former coastlines, and some may have left detectable traces. Since Hudson's synopsis, however, only one artifact, a stone mortar, has come from a submerged context. It is the only one known with a provenience even close to precise. Inaccurate and vague locations make progress difficult in this area.

Similarly, yachting and recreational use of boats receive short shrift here, even though bits and pieces of sailboats can be found more and more commonly around the islands. A problem in assessing them is the propensity of the fiberglass boat to disintegrate, literally overnight, into tiny gel-coated bits of laminate. Yet recreational use of the islands is an important use today; it is part of the area's maritime history, undoubtedly with its own unique environmental effects.

Our ignorance of prehistoric watercraft is enormous. Humans reached the islands at least 10,000 years ago (Moratto 1984:71) and produced conspicuous middens by 8,000 B.P. Since the islands were not connected to the mainland at that time, what watercraft were used? Documented remains of watercraft that could shed light on this era would be the most important new information possible for the maritime history of the Channel Islands--even more important than finding the quasi-mythical Spanish galleon alleged to lie off San Miguel Island. We have included in this report a section that summarizes our scant knowledge about prehistoric watercraft in the Channel Islands and the myth and hearsay surrounding possible Spanish wrecks.

In terms of maritime history, the gold rush of 1849 stands as a watershed between the relatively tranquil time of Hispanic California described superbly in *Two Years Before the Mast* (Dana 1965) and the rapid developments following it. Accordingly, a section deals

briefly with the gold rush, the development of the steamship route to Panama, and associated wrecks.

The greatest part of the report deals with historical and archeological data acquired about post-gold-rush vessels. These are presented under the headings of the activities with which the vessels were associated. Within each section, vessel accounts are presented chronologically by time of the incident that brings the vessel to our attention. Discussion of precise locations is deliberately a little thin; this assessment is not intended to be "A Looter's Guide to Channel Islands National Park and Marine Sanctuary."

Preparing this report has been the best possible way to realize how much more there is to learn about the submerged cultural resources of the park. For small boats, recreational vessels, and many other subjects, there is surely more information to be gathered, both from archival research and from fieldwork.

Throughout this report, we use English measurements and distances because this was the system in common use under which nearly all the documented vessels were built.

Dimensions and tonnage figures come either from copies of ship's documents or from some official source, typically *Merchant Vessels of the United States*. We also employ the following series of abbreviations for the islands and for frequently cited publications and newspapers.

Table 1.1. Abbreviations Used in Publication

ANI	Anacapa Island
SBI	Santa Barbara Island
SCR	Santa Cruz Island
SMI	San Miguel Island
SRI	Santa Rosa Island
LAT	<i>Los Angeles Times</i>
MVUS	<i>Merchant Vessels of the United States</i>
RAFS	<i>Record of American and Foreign Shipping</i>
SBDP	<i>Santa Barbara Daily Press</i>
SBMP	<i>Santa Barbara Morning Press</i>
SBNP	<i>Santa Barbara News Press</i>
VSFP	<i>Ventura Star Free Press</i>
BLM	Bureau of Land Management
NPS	National Park Service

CHAPTER II

Overview

A chain of four islands—Anacapa, Santa Cruz, Santa Rosa, and San Miguel—together with Santa Barbara Island, forms the nucleus of Channel Islands National Park and Channel Islands National Marine Sanctuary. The park consists of these five islands and their offshore waters for a distance of 1 nautical mile, while the marine sanctuary comprises the waters offshore from these islands for a distance of 6 nautical miles.

The four islands lie off the coast of southern California at a distance that varies from 11 miles at the eastern, or Anacapa, end to 26 miles at the San Miguel, or western end; together they form the southern boundary of the passage known as the Santa Barbara Channel. North of San Miguel Island on the California mainland is Point Conception, which marks important biological, geological, and cultural boundaries. To the east of the islands lie Santa Monica and San Pedro bays and the Pacific Rim hub of Los Angeles.

Today, bold magenta markings on nautical charts show the official shipping lanes that funnel commercial vessels from Point Conception eastward to Los Angeles.

These lanes, used by coastwise and trans-Pacific vessels alike, bring ships past the four northern islands to the ports of the Los Angeles basin, the largest ports on the West Coast. Vessels that failed to find the entrance at the west end or that misnavigated along the way contributed to the shipwreck record of the park and provide the greater part of the subject matter of this report. As an informal sample of the vessels that have plied these waters, the wrecks of Channel Islands National Park reflect the development of Los Angeles from a sleepy pueblo into a major maritime center.

From very early prehistoric times, the Santa Barbara Channel (Figure 2.1) and the islands have seen a variety of watercraft, from Chumash plank canoes (*tomols*), reed rafts, and dugouts to the increasingly diverse craft that characterize recent, cosmopolitan cultures—a range that spans Spanish galleons and modern aircraft. These vessels either transited the channel en route to distant Pacific ports or West Coast destinations or voyaged to the islands to profit from their rich resources. Because the topography, weather, and natural

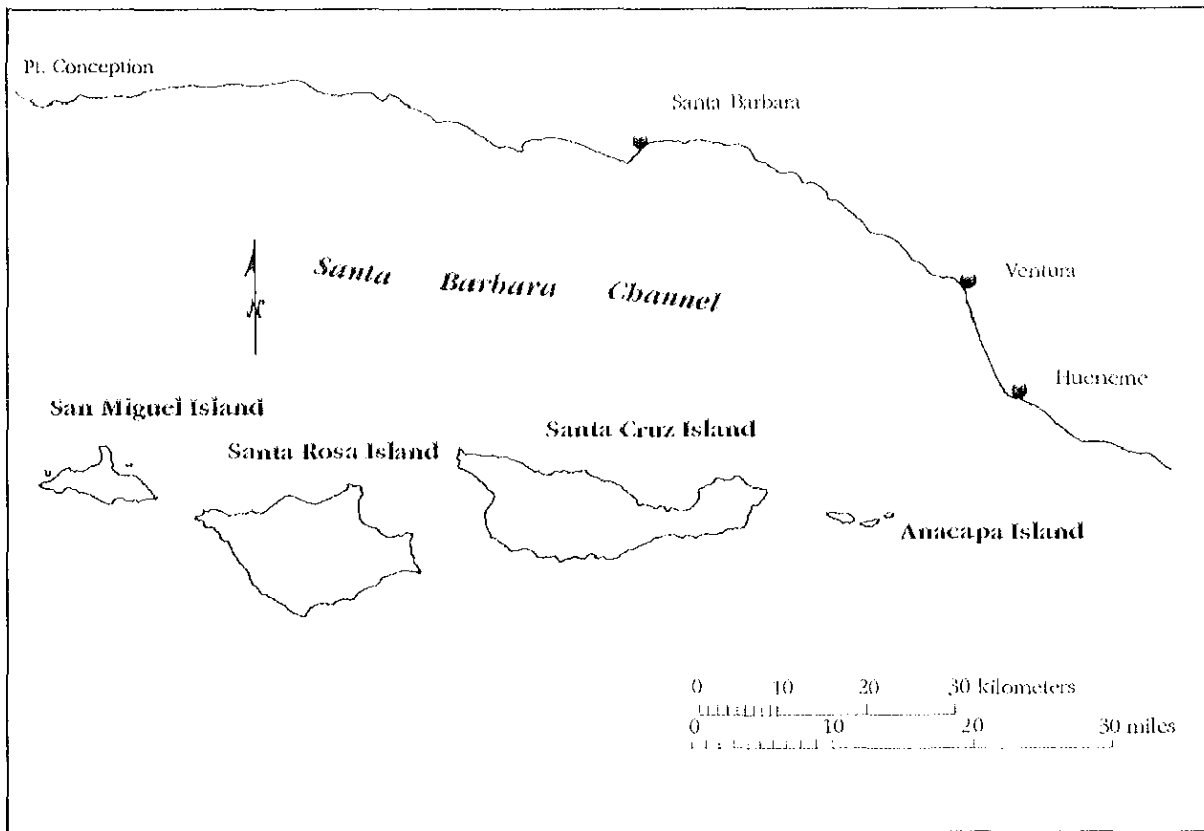


Figure 2.1. Santa Barbara Channel.

features of this region have influenced the wrecking of these vessels, a short discussion of these important factors is in order.

Geography

Considering that the four northern islands are separated by passages only a few miles across, the differences among them are startling. These differences are expressed in terms of topography, weather, and both marine and terrestrial plants and animals.

San Miguel Island (Figure 2.2) consists of rolling hills reaching a maximum elevation of 831 feet above sea level. Greatly overgrazed by sheep during most of the past 150 years, bare sand dunes and a low chaparral plant community, now flourishing again, cover the island. Because

the island projects to the west beyond the protection of Point Conception, its weather is remarkably windy and foggy.

Santa Rosa Island (Figure 2.3) features a relatively flat terrace on its northern part, flanked by a relatively steep mountain ridge that reaches a height of 1,589 feet. In addition to chaparral and grasses, stands of oak trees and two species of pines grow in sheltered locations on the island. Weather on Santa Rosa Island is calmer than that of San Miguel but is still notably windy and foggy.

Both San Miguel and Santa Rosa islands contain sedimentary formations, typically of Oligocene and Miocene age, interlaced with intrusive Miocene volcanics. Exploiting their weakness, the ocean has eroded into the softer sedimentary formations to form

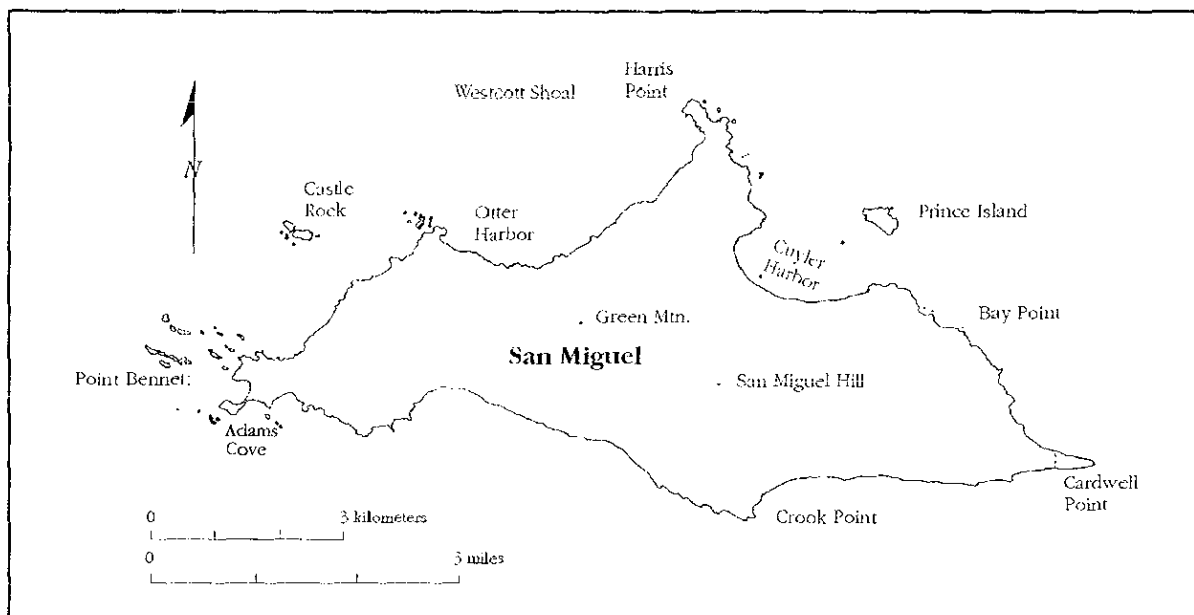


Figure 2.2. San Miguel Island.

Cuyler Harbor on San Miguel Island, a process that continues actively today.

Santa Cruz Island (Figure 2.4), the largest and most rugged of all the Channel Islands, reaches a height of 2,434 feet at Mount Diablo. The island is made up of two parallel east-west trending mountain ridges flanking a secluded interior valley. The north coast is steep and rugged, while the south side contains several beaches and sheltered coves. Santa Cruz is relatively sheltered by the mainland mountain ridges to the north. Prisoners Harbor is the principal harbor.

Anacapa Island (Figure 2.5) is actually composed of three separate islets that are nearly joined by sandspits at low tide. Together these islets comprise a steep volcanic ridge. East and Middle Anacapa are relatively flat compared to rugged West Anacapa, which reaches a height of 930 feet on Summit Peak. Frenchy's Cove, where Middle and West Anacapa meet, is the most reasonable landing. Until the construction

of the Anacapa Light in the early 1930s, the present landing cove was not particularly accessible. Relatively calm conditions prevail on Anacapa even when the outer islands are quite unsettled.

Santa Barbara Island (Figure 2.6) is the tip of a Miocene volcano. The smallest of the islands in the park, at 640 acres, it generally experiences the calmest seas and weather. Its coastline is rugged and difficult, except for a few locations on the east side.

All the islands have seen at least sporadic attempts at occupation and grazing during historic times, although these episodes were short lived on Santa Barbara and Anacapa. The larger operations all involved support vessels that transported supplies, stock, and personnel from island to mainland on a frequent basis.

Although the islands' terrestrial resources, other than their grazing potential, are relatively sparse, the surrounding waters sparkle with life, supported by the kelp

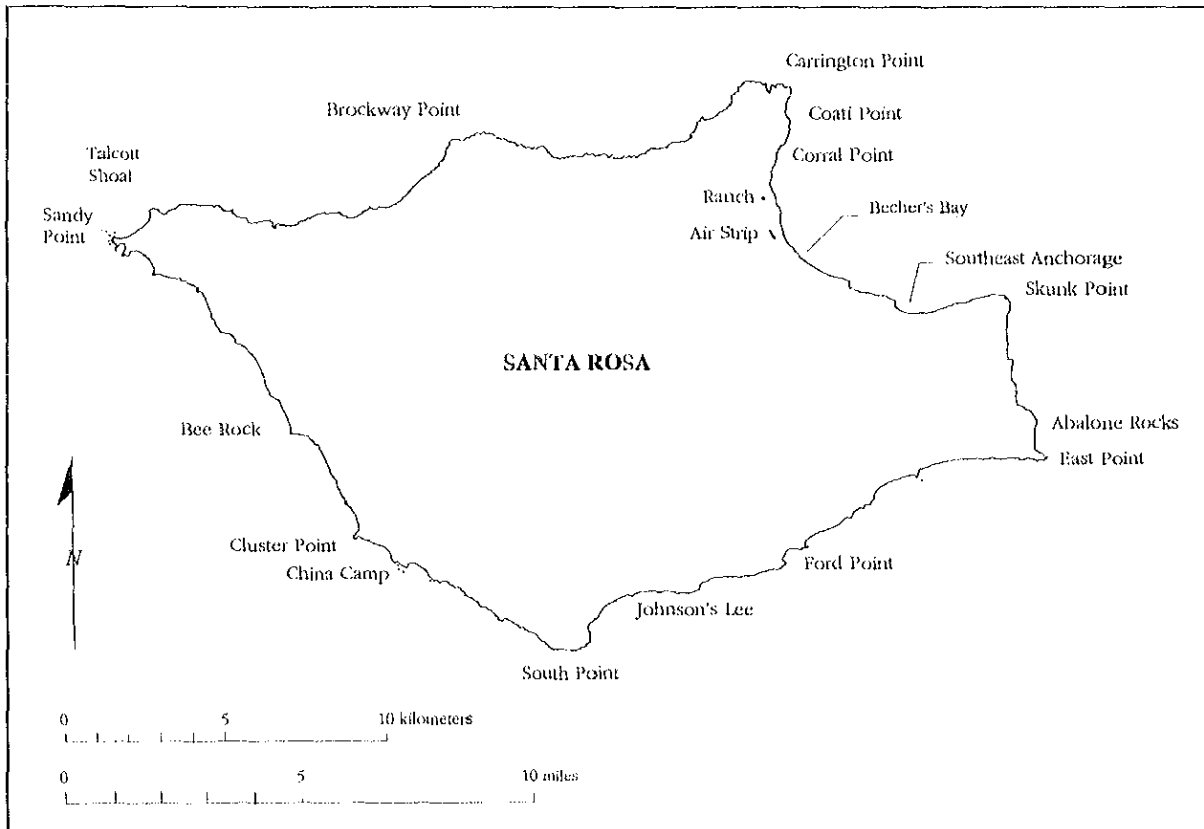


Figure 2.3. Santa Rosa Island.

forests that abound in depths out to 100 feet. This singularly productive system supported prehistoric occupation for at least eight millennia and has survived historic exploitation, though with changes and consequences that are not fully understood.

Weather

Wind and weather reach the Channel Islands from the northwest. The California Current proceeds south along the California coast, bringing cold water to the channel. Northwest winds that frequently build large seas result from the typical presence of the Pacific high pressure area offshore, which causes a flow toward low pressure areas onshore. The variable strength and location of the Pacific high together influence the

track of storms that pass through the islands and make the Santa Barbara Channel a very interesting and unpredictable weather area.

One need only read a few accounts of shipwrecks in these waters to realize that fog causes conditions favorable for wrecking. The *Goldenhorn*, the *Cuba*, the *Chickasaw*, and the *Winfield Scott* all wrecked in fog. Fog forms easily on the islands, owing to a variety of conditions. It is most common at the western end of the channel, where both San Miguel Island and Point Conception—the western mainland terminus of the channel—frequently experience sufficient fog to hinder navigation.

The climatic conditions are very variable around this island. It

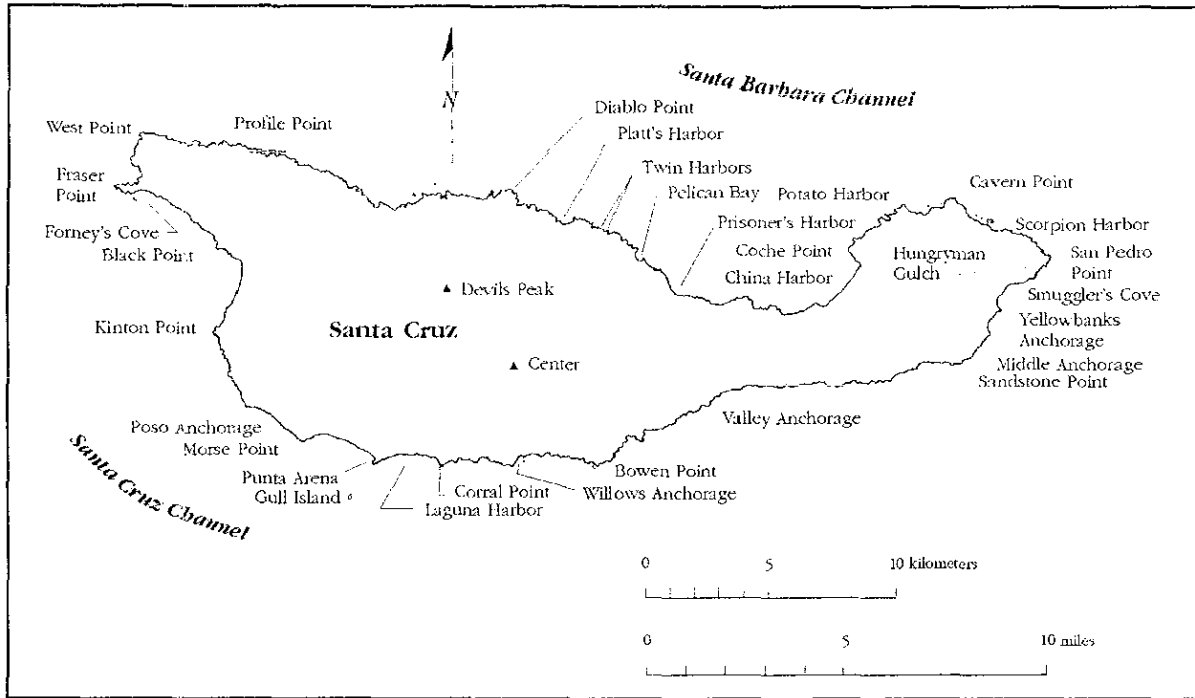


Figure 2.4. Santa Cruz Island.

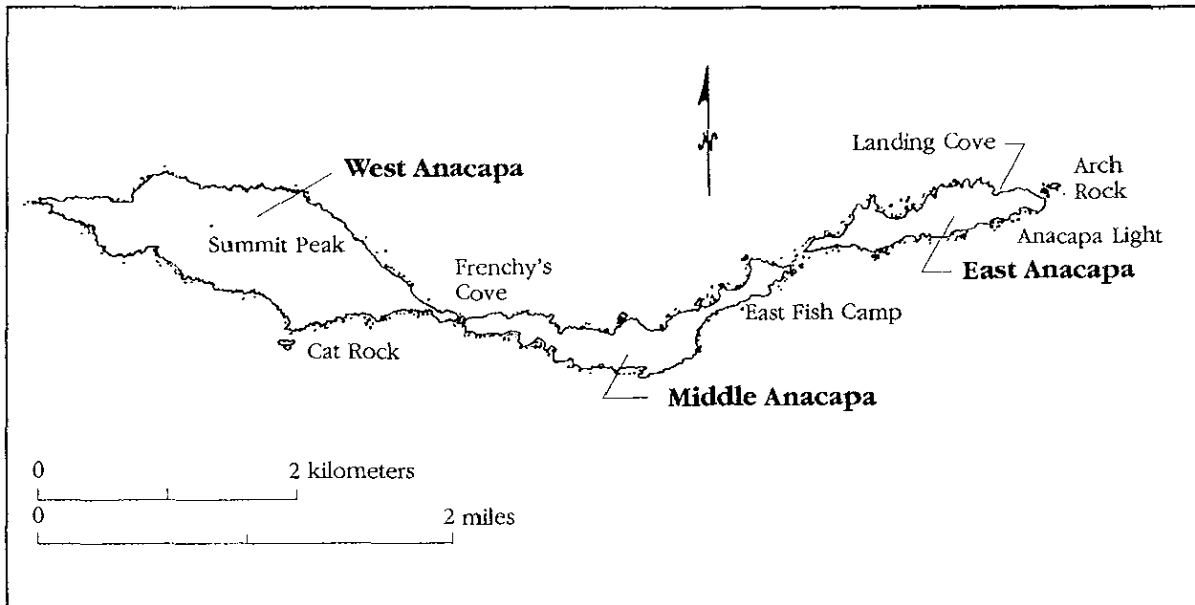


Figure 2.5. Anacapa Island.

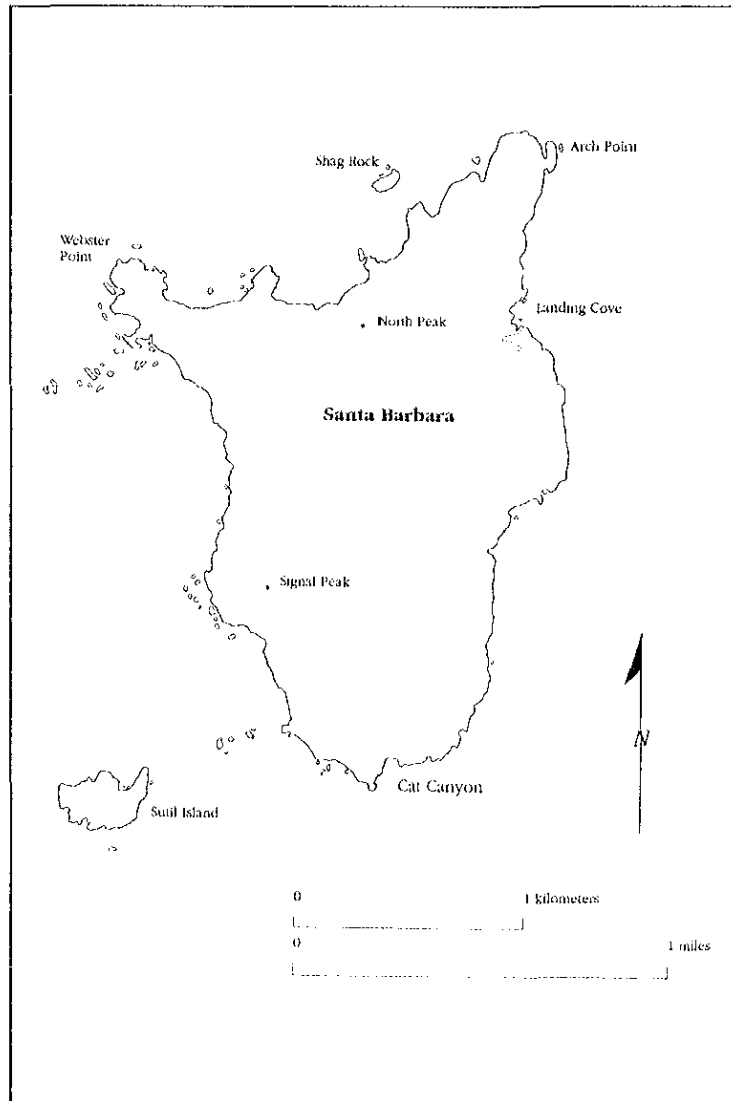


Figure 2.6. Santa Barbara Island.

receives the full force of the northwest winds and swell, and in summer, fogs envelop it more than half the time. Even if the weather clears off in day-time the fogs settle over it at night. When we were encamped for more than three months at Point Conception, we did not see it and the other islands for several weeks on account of the fog [Davidson 1889:93].

The persistent fog results primarily from the upwelling effects of the California Current as it sweeps down the coast and around San Miguel and Point Conception, bringing cool, deep water to the surface, where, if the air is warmer, it causes moisture to condense, creating fog. A land breeze may also blow warmer surface waters out to sea, which brings cooler water to the surface with the same result. Fog can form

quickly and become quite dense under these conditions.

In addition, the persistent northwesterly winds bring warm air to the channel, where it picks up moisture. Fog forms as the air cools during the evening, persisting until the warming sun heats and dissipates the fog in midday. This moist layer, the marine layer, is often capped by warm, dry air that contains the heavier, foggy air below it. Fog can also occur as landward air heats and rises, drawing moist air in from the ocean. When this air cools during the evening, fog may form.

Fog is common throughout the year in the channel; it is most common in the early summer and on the windward, or northwest, sides of the islands, particularly San Miguel and Santa Rosa. From Point Conception to Gaviota, the mainland coast is often fog free.

Southeasters, or cyclonic lows, affect the area during the winter, occurring as early as October and lasting into May. These storms generally peak in frequency and intensity from December through February. They bring rain and snow to the area, and their strong winds and heavy seas pose great hazards to mariners—especially because after the front passes, winds shift from the initial southeast direction to the southwest and then to the northwest, and velocities increase to 20-30 knots or more. The worst sea conditions often occur when skies clear after the front has passed (Fagan 1983:43). Wind gusts of up to 100 knots have been recorded at Point Conception in connection with these storms. Dana (1965) provides a vivid account of the labor sailing crews performed to avoid being caught in harbors turned suddenly into lee shores by southeasters.

Santa Ana winds blow from the mainland out to sea from the northeast when high pressure systems occupy the interior of the mainland. They bring ferocious winds to the eastern portion of the channel, although conditions often remain mild and pleasant on the outer islands of San Miguel and Santa Rosa. Anacapa Island receives strong Santa Anas from the Santa Clara River valley, which can blow 30 knots with gusts to 80 knots and higher.

Weather and sea conditions frequently vary from one end of the channel to the other. Heavy weather and seas are more common to the west in the islands, an important point to remember when one is experiencing balmy conditions around Anacapa and contemplating a voyage to San Miguel. These variable environmental conditions enhance the diversity that characterizes the biological resources of the islands.

While storms and fog obviously create problems for mariners, the absence of wind also can be hazardous for sailing vessels that lose way and steerage and are then moved only by currents, at random, often into danger. Lack of wind played a part in the wrecking of the *Goldenhorn*.

Surface Currents

Surface currents in the Santa Barbara Channel and around the islands are complex, being influenced by a variety of factors. Very important is the California Current, which flows south offshore from the coast as part of the general circulation pattern of the Pacific Ocean. At Point Conception, the configuration of the coastline generates a northward flowing eddy, the Southern

California Counter Current, which usually flows to the south near the islands and north along the mainland coast. This condition is common from July through November, a time that is termed the Oceanic Period.

In a typical year, the Oceanic Period is followed by a weakening of the California Current from November through February. This results in the surfacing of the Davidson Current, often manifested as a general northern flow around the islands and in the Santa Barbara Channel. The balance of the year is called the Upwelling Period, with surface currents similar to those of the Oceanic Period but generated primarily by strong surface winds.

It must be emphasized that these patterns are not entirely reliable and predictable. Oceanic Period currents tend to peak in September and October, whereas the upwelling system is often very strong in May, June, and July and the Davidson Period is strongest in December and January. The situation varies from year to year.

Navigation and Shipping Hazards

During storms and periods of reduced visibility, the islands themselves are navigation hazards. Although many parts of the islands within the park, especially Santa Cruz Island, are clear of hazards, certain areas are extremely foul.

"The most dangerous [island] to approach" (Davidson 1889:93), San Miguel offers the roughest weather, the greatest number of submerged rocks, and the poorest visibility in the park and sanctuary. These superlatives combine with numerous shoal areas to produce the greatest density of shipwrecks in the park. Many hazards

converge in Simonton Cove, a lee shore for coastal shipping vessels attempting to enter the Santa Barbara Channel and a gigantic catcher's mitt for those who misnavigate.

Dangers are especially common off the northwest shore of San Miguel Island, particularly at Westcott Shoal, which extends west for 1.5 miles from Harris Point and generally south to Point Bennett. Castle Rock is the largest and most prominent of these hazards (Davidson 1889:95). Wilson Rock lies 2.2 miles northwest from Harris Point. Deep water around Wilson Rock and its associated reefs, and the lack of kelp growing there, hinders detection of this hazard in foggy weather. Numerous rocks lie off Point Bennett. Richardson Rock, 5.5 miles northwest from Point Bennett, likewise rises from deep water.

Although the south coast of San Miguel is reasonably clear, Wyckoff Ledge rises to within 15 feet of the surface about 0.5 mile off the south shore. Foul ground lies east of Crook Point, situated at about the middle of San Miguel's southern shore. Cardwell Point, a shoaling sandspit often marked by spectacular breakers, extends a reef 1 mile into the San Miguel Passage. Even Cuyler Harbor, one of the more popular anchorages in the islands and certainly the most commonly used anchorage on San Miguel Island, contains its dangers, most notably Can Rock and Middle Rock.

Currents around San Miguel generally conform to the northwesterly winds but generate eddies at Point Bennett and east of Cardwell Point; each of these can carry vessels into danger.

Santa Rosa Island, 3 miles east of San Miguel, provides somewhat better weather and fewer hazards, although much of its shore is exposed and no good anchorages

exist. The best can be found at Johnson's Lee and Becher's Bay.

At Sandy Point, the western promontory of Santa Rosa Island, rocks lie within 0.2 miles of shore; heavy currents sweep through here during northwesterlies. Bee Rock, 0.8 miles off the southwest shore, is quite low. It is one of several dangers along this shore, most of which lie well within the extensive kelp beds found here. A rock lies northeast from East Point. Rocks are also found north of Skunk Point.

Beacon Reef renders close approaches to Carrington Point, the northeast corner of Santa Rosa Island, hazardous. Rodes Reef is found to the west. As on the south coast, several rocks occur inside the kelp beds along the northern shore. One and one-half miles northeast of Sandy Point, Talcott Shoal rises to within less than 15 feet of the surface.

Davidson (1889:85) noted only Gull Island as a notable hazard associated with Santa Cruz Island, devoting instead many paragraphs to discussing the numerous anchorages near the island. An area near West Point, the notorious "Potato Patch," produces chaotic seas when currents and wind oppose one another, creating real hazards for smaller boats. "Stay away!" is one park captain's advice (Dwight Willey, personal communication).

Anacapa Island marks the eastern, narrow end of the Santa Barbara Channel and thus is an intrinsic hazard in foggy weather. Several wrecks lie close to the island. Anacapa's shores are rocky and high. Cat Rock, off the south shore of West Anacapa, is the most significant outlying hazard. Strong currents can run at either end of the island, with resulting chaotic seas.

Near Santa Barbara Island, outlying Sutil Island and Shag Rock have rocks close by that pose problems for approaching boats. The area around Webster Point also contains numerous rocks. The most dangerous hazard is "Seven-tenths Rock," an isolated rock due west of Webster Point. Water does not always break around it in calmer conditions and hence it is difficult to detect.

Anchorage: Problems and Shortcomings

Locating a safe, sheltered anchorage in the Channel Islands is not a straightforward process. There is no all-weather harbor in the islands. The unwary ship captain who does not respond to changes in the weather will find his vessel on a lee shore. This is particularly true of the more popular anchorages, such as Cuyler Harbor on San Miguel Island and Smuggler's Cove on Santa Cruz Island, which present hazards when the prevailing northwesterlies yield to southeasters or Santa Anas.

Cuyler Harbor holds more than its proportionate share of wrecks. The *Kate and Anna* went aground in April 1902 as its anchor chain failed, overstrained in a hard northwesterly blow (Haller 1986). Other, recent fishing vessels in Cuyler Harbor include the *Deano* and the *Gold Coast*. The *Gold Coast* stranded in July 1985, just before the fieldwork for this project began, and another boat, the *Susie*, stranded in February 1994.

Cuyler Harbor is a reasonably good anchorage; one reason there are several wrecks there is simply its popularity. It does not offer complete protection in all weather, and a strong northwest swell can wrap around Harris Point, invading the

anchorage (Peter Howorth, personal communication). Although Davidson (1889:96) stated that the holding ground in the anchorage was not good, many captains today consider it quite suitable. Perhaps this change in perception relates to the development of new anchors that work better in hard sand, the prevailing bottom in Cuyler Harbor, than the traditional forms. The bottom in Cuyler Harbor may have changed considerably since Cabrillo's time due to widespread erosion in the last 150 years. Cuyler Harbor becomes a lee shore during southeasters and extremely strong Santa Anas. Even under the prevailing northwesterlies, a vessel dragging anchor can wreck quickly on the beach at the southeastern end of the bay. Several have done so.

Santa Rosa Island contains remarkably few anchorages, the best two being Johnson's Lee and Becher's Bay. Becher's Bay provides shelter from northwest seas, but the headland of Carrington Point, if anything, accelerates northwest winds. Although Becher's Bay is relatively wide, Skunk Point provides a lee shore under most conditions. Johnson's Lee, which also provides better protection against seas than against winds, at least offers ample sea room to leeward. A strong southern swell can

complicate anchoring here during the summer months.

Santa Cruz Island, in contrast, provides numerous bays and inlets, a small-boat sailor's delight. Davidson (1889:86-88) discussed 16 anchorages on this island, and modern cruising guides, catering to the needs of smaller recreational sailors, know of still more. Although these anchorages now serve recreational needs, many of them were the sites of small fishing or lobster camps in the late nineteenth and early twentieth centuries. Changing weather or a strong southerly swell can turn any of these into traps.

Anchorage on Anacapa and Santa Barbara are marginal; landing coves and docks on both islands have been modified and improved in recent years, but neither island is capable of providing unattended shelter for long periods of time.

The larger vessels that wrecked on the islands, engaged in voyages to and from the major ports of San Francisco or San Pedro, had no need of island anchorages. The Channel Islands were no more than complications to be dealt with in reaching or leaving port. Vessels engaged in sealing, fishing, or island support, however, habitually employed these various harbors around the islands for shelter from storms and periods of rest.

CHAPTER III

Prehistory through the Gold Rush

Juan Cabrillo, exploring for Spain, was the first European to contact an impressive people now known as the Chumash, who lived in settled communities along the mainland shores of the Santa Barbara Channel and on the islands. Developers of an elaborate and complex way of life, the Chumash intrigue anthropologists because their culture derived entirely from a hunting and gathering base. Maritime products figured prominently in Chumash subsistence, and their key implement for fishing was the *tomol*, or plank canoe, an item they shared with their neighbors to the east, the Gabrielenos. The *tomol* impressed the early Spaniards enormously:

The expertness and skill of these Indians is unsurpassed in the construction of their canoes of pine boards. . . . They fasten the boards firmly together, making holes at equal distances apart, one inch from the edge, matching each other in the upper and lower boards, and through these holes they pass stout thongs of deer sinews. They pitch and caulk the seams, and paint the whole with

bright colors. They handle them with equal skill, and three or four men go out to sea to fish in them. . . . They use long double-bladed oars, and row with indescribable agility and swiftness [Costanso in Roberts and Shackleton 1983].

By all accounts these vessels were swift, maneuverable, handy in surf, and generally seaworthy. Employed for fishing and travel between the islands and the mainland, *tomols* were a key technological element in Chumash culture. Correspondingly, the construction and use of the *tomol* figured in a web of social, economic, and religious relationships that pervaded Chumash society.

The *tomol* was not the only watercraft utilized by the Chumash; they also employed three- and five-bundle tule balsas and dugout canoes. The Chumash typically launched

these craft only in lagoons and other sheltered waters, although Harrington (1978) states that tule boats did make cross-channel trips.

The *tomol*, unique among native North American watercraft in being constructed of

thin wooden planks sewn to each other and to a flat "keel board," resembles in many characteristics a dory, the work boat developed by fishermen of European background. Both types of craft possess straight bottoms from which rise gently rounded strakes, culminating in a pronounced rocker sheer. Although at a casual glance the tomol appears to be double ended, this is not so; the bow is distinctive, basically being thinner in cross section than the stern (Harrington 1978:64). Similar subtle, albeit significant, differences are characteristic of most types of dories.

One major difference is that a dory crew typically rowed, whereas the tomol crew paddled. The Chumash developed two varieties of paddle, one short and single ended, the other double bladed and between 6 and 10 feet in length. The redwood blades were grooved and lashed to a separate ironwood shaft.

Although Harrington (1978:118) states the case for the paddle blades being offset, or feathered—that is, attached to the shaft so that the blades are at right angles—there are no existing ethnographic examples or observations to support this interpretation. Throughout North America, groups using double-bladed paddles to propel kayaks employ unfeathered paddles. One reason may be that the wrist action required to manipulate a feathered paddle tends to cause severe and disabling tendinitis; the unfeathered paddle is much kinder, particularly when one is paddling for long periods. Modern recreational sea kayakers debate endlessly the contrasting merits of feathered and unfeathered paddles; there is no obvious choice.

Because large trees for production of dugout canoes are scarce in the Chumash area, the use of the abundant redwood, pine, and

Douglas fir driftwood to produce an edge-sewn plank canoe seems to have been an environmentally conditioned pattern. Most conjectures about the tomol speculate that the vessel developed from a dugout form. Archeological evidence with which to test this idea is rare.

Archeologists have recovered fragments of tomols from sites on San Nicholas Island, 41 miles south of the park, and on Santa Cruz Island, Santa Rosa Island, and Catalina Island, all from late contexts. Nothing like a complete example has been reported. Such a find would be extremely important and useful, even if from a relatively small boat.

A recent terrestrial survey of Santa Rosa Island does suggest some likely offshore areas where the potential exists for recovering submerged prehistoric sites. In 1991, survey crews located archeological site SRI-91-15, an early Holocene site with a date of $7,350 \pm 70$ RCYBP (Beta 47626). This site is very close to the beach just south of Skunk Point, on the eastern coast of Santa Rosa Island. The imposing sea cliffs that indicate vigorous erosion elsewhere on the island are completely absent at this locality. Reconnaissance dives immediately offshore from the site show plentiful vegetal debris, including Torrey pine cones that come only from groves to the northwest along the island's coast. If there were a site along the coastline here 8,000 years ago, it would lie roughly 60 feet below sea level. The present environment suggests that a hypothetical site here might be covered with recent sediments, unlike other sites elsewhere on the island where erosion has probably scattered and dispersed the cultural material, with the exception of the stone bowls and mortars that have been recovered in recent years.

Searches for submerged prehistoric sites might examine those rare areas around the

island where deposition of sediments, rather than erosion, predominates. One of the best areas would be the Santa Rosa Island coastline from Skunk Point to East Point; another might be the immediate environs of Prisoners Harbor on Santa Cruz Island.

Euro-American Vessels Before the Gold Rush

According to the sketchy historical record, there were very few shipwrecks before the gold rush of 1849 and the torrent of shipping that developed as the Euro-American population of California grew. There is no record of any loss of vessels of exploration in southern California, although Cabrillo's ships may have left behind some anchors and the *Victoria* grounded briefly somewhere in the islands. While there may have been no maritime disasters, this was certainly an important time during which American mercantile interests came to know California through the China trade, sea otter hunting, and the surprisingly lucrative hide and tallow business.

Between 1565 and 1815, Manila galleons traversed the Pacific Ocean from Manila to California, a six-month voyage, and then ran down the coastline to Acapulco. The galleons would sight land usually around Monterey but sometimes as far north as Cape Mendocino or as far south as Baja California. Over the years, 10 to 12 of these vessels vanished without any record and have not yet been located.

A Manila galleon is rumored to lie off San Miguel Island (Howorth and Hudson 1985), although there is no substantive record in a credible source for this statement. No definite physical or documentary evidence for such a shipwreck has yet come to public view.

A galleon is alleged to have sunk near Point Bennett on San Miguel Island, and a

salvage claim was filed with the California State Lands Commission in the 1970s. The South Central Coastal Commission authorized a permit to Gibson-Pierson Ship Salvors, Inc., of Toluca Lake on July 25, 1974 (SBNP, July 26, 1974). The project is described as follows: "Archeological type recovery of a wrecked wooden vessel. The purpose of this application is to allow the salvage of a 300-400 year old wooden vessel lying in approximately 50 feet of water off the northwest side of San Miguel Island." The *News Press* further states that the vessel was 60 feet long, "carrying a cargo valued at \$100,000 or perhaps several times that amount." As a condition of the permit, the project was to be monitored by the Santa Barbara Trust for Historic Preservation and the Santa Barbara Museum of Natural History (minutes of the South Central Coast Regional Coastal Commission, July 25, 1974, item 40-12).

At least one public meeting was held at the Santa Barbara Museum of Natural History describing the project, but there is no record that any fieldwork took place other than that mentioned a newspaper article announcing "Recovery Plan Abandoned." The article quoted Travis Hudson of the Santa Barbara Museum of Natural History, who was appointed monitor for this project. Hudson stated that "investigation indicates that the wreckage is scattered too widely to make exploration and salvage convenient," and "some objects had been recovered from the wreckage many years ago, but that not much information had been gained from these recoveries." Hudson certainly spoke truly. He did tell the senior author a shadowy tale of a "golden captain's ring" that the salvors showed to prospective investors as "proof" of the existence of this galleon—but no one ever explained to Hudson how such a specific

artifact could come from wreckage "scattered too widely to make exploration . . . convenient."

In October 1979, the Coastal Commission rescinded this permit, commenting that "the Commission staff and Attorney General's office attempted to work out the specifics of the permit, which would conform with the Commission's authorization. However, an agreement could not be reached with the applicant on an acceptable format, and no permit was consummated." Exhibits A and B attached to this document described and illustrated the area in which explorations were to have occurred:

Beginning at a point in the Pacific Ocean located at 34° 04' 15" north latitude, 120° 25' 19" west longitude; thence southwesterly 1.4 miles, more or less, to a point located 34° 03' 29" north latitude, 120° 26' 43" west longitude; thence S 33° 05' E, 1.25 miles, more or less, to the ordinary high water mark of San Miguel Island; thence northeasterly along said ordinary high water mark to a point that bears S 33° 05' E from the point of beginning; thence N 33° 05' W, 1.35 miles, more or less, to the point of beginning.

This area is generally the waters between Westcott Shoal and San Miguel Island, from Otter Harbor at the southwest end of Simonton Cove, southwest along the coast for about a mile and a quarter.

As later discussion of coastwise wreck patterns will make clear, San Miguel Island is a highly plausible location for a vessel running along the California coast to wreck. The prevailing winds and currents, aided by fog, would throw a galleon onto the lee shore of

the northwest coast of San Miguel Island in just the way that later lumber schooners wrecked. Similarly, wreckage from vessels breaking up offshore would fetch up on the beaches in this portion of the island. No material from a galleon or its cargo has ever been recovered from this area, however, nor have any Spanish-period artifacts been recovered from archeological sites on the island—unlike material from the wreck of the *San Augustin* in Drakes Bay near San Francisco. The existence of a galleon near San Miguel Island seems dubious at best.

The quest for sea otter pelts that brought Aleuts on board American and Russian vessels to the Channel Islands around 1800 did not result in any known shipwrecks either. The nature of the Aleut presence on the islands is largely unknown, although Aleut artifacts have been identified from collections, primarily from San Nicholas Island. Two possible Aleut artifacts have been documented from Santa Rosa Island, and ethnic Aleuts are known to have come to the mainland missions when the Chumash population abandoned the Santa Rosa (Heizer 1955). Sealing vessels later in the century, which took an occasional rare sea otter from a rapidly declining population, are discussed in a later chapter.

Although the years before the gold rush offer no definite records of shipwrecks near the Channel Islands, they are also a period for which records are likely to be scanty, unresearched, or missing. Many vessels, particularly during the Spanish period, were smuggling and conducting other illegal business. Vessels of the time frequently sought refuge from southeasters by leaving mainland harbors and sailing to the islands, and some might have wrecked in the area. How many undocumented wrecks are there at Channel Islands National Park? There is a definite possibility of encountering wreckage

that has left no documentation whatever, and this wreckage could very easily relate to the period before the gold rush.

Gold Rush

The historical events of the California gold rush and its impacts are discussed at length in Kemble (1943). In terms of the local area around the Channel Islands, the hide and tallow trade, which provided raw materials for leather goods manufactured in New England, was augmented by a steady stream of steamers plying the Panama route, easily the most popular way to reach California's gold fields before the completion of the first transcontinental railroad in 1869. Operations on this route by the Pacific Mail Steamship Company had begun in 1848. As this company and its competitors grew, ships' captains emphasized speed; it is no great surprise that shipwrecks occurred in this trade.

One ship, the *Winfield Scott*, is known to have wrecked in the Channel Islands during the gold-rush period, and debris from another, the *Yankee Blade*, may have washed up on island beaches.

Winfield Scott

1850–1853

Side-wheel Passenger Steamer

Gross Tonnage	1,291 tons
Net Tonnage	---
Length	225 feet
Beam	34 feet, 8 inches
Depth	29 feet, 2 inches
Decks	three
Official Number	---
Construction	wood, metal bracing

Historical Record

James Delgado (1982) has fully researched and reported the historical events surrounding the last voyage of this vessel, a National Register property. The following is a short summary of Delgado's work.

The New York firm of Westervelt and MacKay built the *Winfield Scott* in 1850, naming the vessel for the commanding general of the U.S. Army, hero of the Mexican War, and presidential nominee. The *Winfield Scott* was launched on October 27, 1850, and began operations on the route between New Orleans and New York. With the beginning of 1852, the *Winfield Scott* became part of the recently formed New York and San Francisco Steamship Line. The *Winfield Scott*'s transit from New York to San Francisco via Rio de Janeiro and Cape Horn—less than 49 days—set a record for that route (Delgado 1982:8). The vessel embarked upon the coastal run between San Francisco and Panama in April 1852, usually traveling overcrowded. The loss of the *Tennessee*, a Pacific Mail Steamship Company vessel, caused that company to purchase the *Winfield Scott* in July 1853.

The *Winfield Scott* departed San Francisco upon its last voyage on December 1, 1853, with a full load of passengers and a shipment of gold bullion. Selecting the Santa Barbara Channel rather than a passage outside the islands in an effort to save time, Captain Simon F. Blunt entered the passage as a fog developed. Evidently intending to steam between Anacapa and Santa Cruz islands, the *Winfield Scott* piled into Middle Anacapa Island at full speed, probably around 10 knots, at eleven o'clock that evening (Delgado 1982:14). Amid general confusion, a boat was launched and located a nearby landing place. The entire ship's company,

more than 300 persons, left the vessel that evening for a small pinnacle 200 yards offshore from Anacapa Island (Delgado 1982:14). The following morning, the ship's boats transferred the group to the island proper. There a temporary camp sheltered most of the group for the next week. The majority of the passengers left on December 10, when the *California* plucked them from the beach and took them on their way to Panama.

The ship's company remained on the island for two more days, concentrating on recovery of the mail and baggage carried aboard. They also recovered some furniture and "small portions of machinery" (Delgado 1982:16). Other salvors removed foodstuffs and other items. Captain Horatio Gates Trussell of Santa Barbara salvaged wood that became incorporated into the home now preserved as the Trussell-Winchester Adobe, which also contains two brass thresholds from the ship.

Major salvage took place in 1894 from the *San Pedro*, operated by Captain Maginn and Colonel Baker. The operation removed several hundred large copper bolts and much of the iron machinery, blasting it into manageable pieces. Additional iron and brass were salvaged during World War II (Delgado 1982:19). The wreck scatter today is a popular dive site, often favored for beginning recreational divers, and sport divers in recent years have been attracted to the wreck by the recovery of gold coins. Park officials have focused their efforts, with some success, on prosecuting violations of antiquity laws that now protect the wreck scatter.

Archeological Record

Reviewing the coast where the *Winfield Scott* wrecked, it seems clear that the passengers and crew camped at Frenchy's Cove, the only reasonable landing on the entire north coast of Anacapa Island. Which rock sheltered them on the first night is more problematical. A steep pinnacle near the site is often indicated as being this shelter; landing the entire company there does not seem possible—not only are its sides vertical, but there hardly seems room. A more likely rock 650 yards west of the wreck scatter offers far more room and much easier landing opportunities.

The visible remains of the *Winfield Scott* (Figure 3.1) bunch behind a large rock just off Middle Anacapa. The wreck scatter is quite small for that of a 225-foot vessel. Indeed, most of the material is propulsion machinery (Figure 3.2), located about amidships on the vessel. Items relating to the bow and stern are absent.

While the first impression the wreck gives to many is that of an aimless scatter, there is, in fact, considerable organization to the visible remains of the vessel. The largest and most obvious piece of wreckage is the shaft for what is usually interpreted as the port paddle wheel. This is the only piece that stands up above the bottom to any extent at all. Around the shaft are the remains of the paddle wheel, including fixtures for several floats, or paddles. Immediately to the south is a massive piece that would have supported this shaft in a huge saddle.

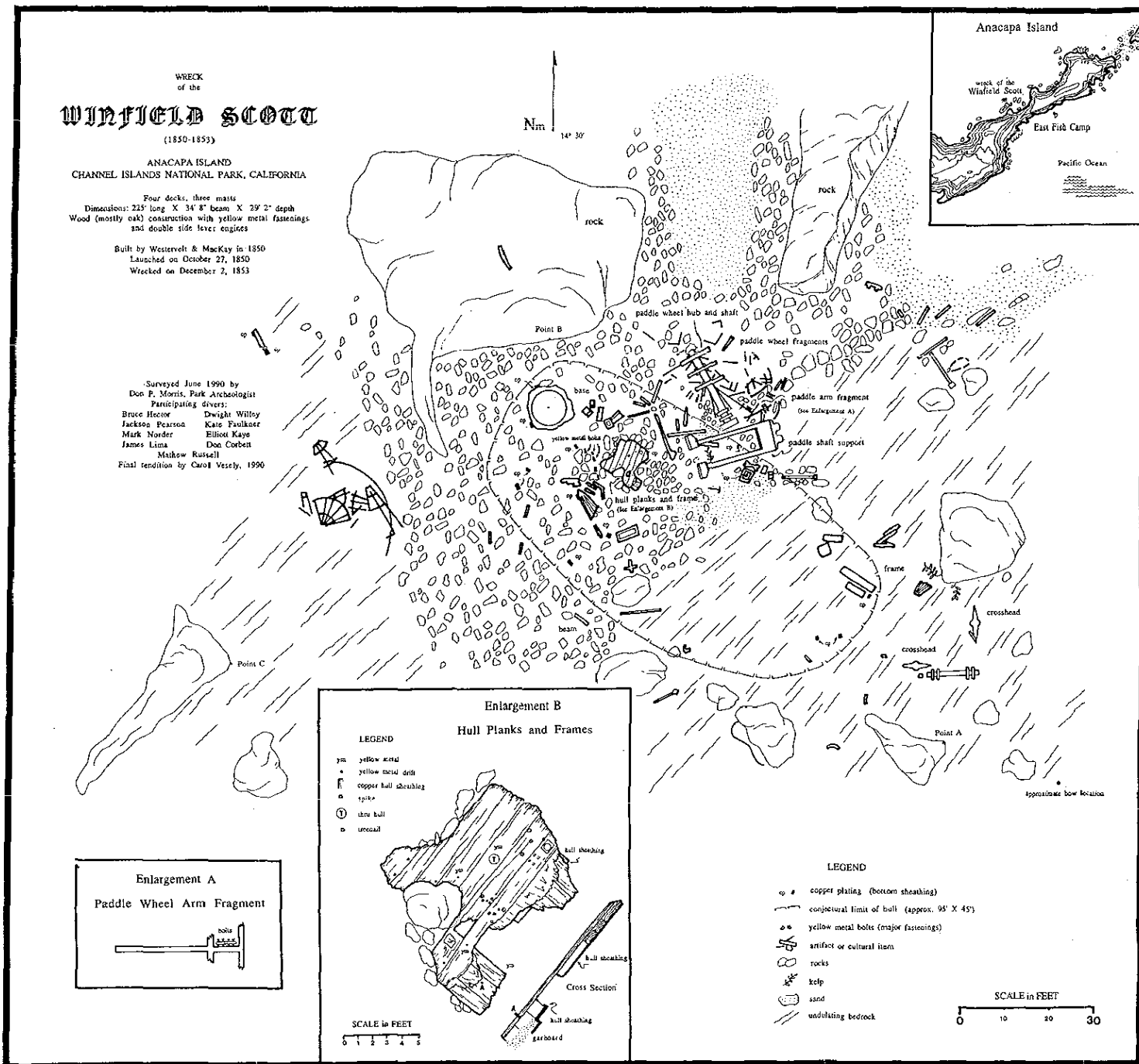


Figure 3.1. Wreckage of the Winfield Scott.



Figure 3.2. Crosshead from the *Winfield Scott*. NPS photo by Dan Lenihan.



Figure 3.3. Brass drift projecting from hull fragment near keel on the *Winfield Scott*. NPS photo by Bob McKeever.

To the west can be found a circular structure, the base of one of the vessel's boilers. Between the paddle wheel and its support lie a line of massive bronze drifts and a section of the outer hull, complete with copper sheathing. Slightly to the south cluster the fragments of yet another paddle wheel, this one lacking its shaft. Clustered nearby are several pieces of relatively undamaged copper sheathing plates, typically protruding from beneath pieces of wreckage or concretion on the seabed. The arrangement of these sheathing plates suggests that a piece of hull about 100 feet in length lies on the seabed, weighed down by the midships machinery (Figure 3.3).

The boiler base, paddle wheels, hull fragment, and paddle-wheel support lie in a structurally correct relationship to one another, except for the boiler's lying astern of the paddle shell machinery. All major pieces are correctly related to one another if the hull fragment twisted around about 180 degrees as the vessel came to rest on the seabed, perhaps pivoting about the large rock that lies north of the wreck scatter. Shifts of this type also occurred in the wrecks of the *Cuba* and the *Aggi*, as will be seen later.

Yankee Blade

1851-1854

Side-wheel Passenger Steamer

Gross Tonnage	1,767 tons
Net Tonnage	---
Length	274 feet, 5 inches
Beam	34 feet
Depth	21 feet, 7 inches
Decks	---
Official Number	---
Construction	wood

Historical Record

On October 1, 1854, the *Yankee Blade* wrecked in the fog at Honda, near Point Arguello, foreshadowing the wreck of many more vessels in the years to come. Why is this wreck discussed in an account of Channel Islands shipwrecks? As will be amply demonstrated in several other wreck accounts, the northwest currents evidently carried several pieces of the *Yankee Blade* to island beaches.

At the time of the wreck of the *Yankee Blade*, I was living on the island of Santa Rosa, in the employ of my uncle, A. B. Thompson. One day while riding on the northwest end of the island, I found a number of pieces of cabin furniture, also cases of lard, and saw many pieces far out in the kelp. The next day, very early, I took a whale boat from the west harbor and a man with me, and went up to the head of the island. On the way up to the kelp, we picked up a chest of medical books, and a trunk or two with nothing in them of value. This was, I think, in 1854. Supposing a steamer to be wrecked somewhere near, the next day we went up to the head of San Miguel to see if we could make any discoveries of a wreck, but of course found nothing. . . . The most valuable wood work of the *Yankee Blade* that we picked up was a carved eagle which came off of the paddle-box. This relic is now an ornament in the theater here [letter to editor from D. W. Thompson, SBDP, March 17, 1881].

The "carved eagle" referred to is often attributed to the *Winfield Scott*. The theater in question is the Lobero. This account indicates that wreckage from other vessels that wrecked along the central coast might also be expected to wash up on the islands, particularly on the north coasts of Santa Rosa and San Miguel.

Archeological Record

The preceding historical account suggests that fragments of the *Yankee Blade* might be expected along the north side of Santa Rosa Island. Island archeological survey has located SRI-91-75, a Chinese abalone camp, which contains burned beams from an iron-

fastened wooden vessel. This site is located close to Sandy Point, the west end of Santa Rosa Island, along the southwest coast. Included in the material are small copper nails, quite comparable to the sheathing nails recorded from the *Winfield Scott*, a vessel very similar to the *Yankee Blade*. Evidently the wreckage in question may have carried copper hull sheathing. While this hardly constitutes definitive identification, the material might reasonably be thought to have come from the *Yankee Blade*. A metallurgical analysis of nails from the *Yankee Blade*, the *Winfield Scott*, and the Santa Rosa site might settle the question.

CHAPTER IV

Wrecked and Grounded Commercial Vessels

The nineteenth century saw a huge expansion of maritime trade and an unprecedented number of increasingly seaworthy vessels traveling the seas. Ocean travel was still hazardous, however, and many vessels came to grief. San Francisco, which had overnight become a major seaport during the gold rush, continued its prominence, especially in the shipping of grain to foreign ports. Coastwise shipping developed as well, moving both freight and passengers to southern California ports. The northern Channel Islands present an obstacle course to

commercial shipping that has claimed numerous vessels.

Between 1892 and 1962, five large vessels wrecked within what are now the park boundaries, and between 1908 and 1954, six others grounded and eventually worked free. In this chapter, we discuss these 11 disasters in chronological order. Two of the wrecked ships, the *Goldenhorn* and the *Aggi*, were sailing vessels, while all the others were steamships. No wooden vessels are represented in this group. Table 4.1 is a summary list of the vessels.

Table 4.1. Wrecked and Grounded Commercial Vessels

<u>Vessel</u>	<u>Date Wrecked</u>	<u>Cargo</u>	<u>Tonnage</u>
<i>Goldenhorn</i>	September 12, 1892	coal	1,915
<i>Crown of England</i>	November 6, 1894	ballast	2,574
<i>Aggi</i>	May 3, 1915	grain	1,898
<i>Cuba</i>	September 8, 1923	general	3,169
<i>Chickasaw</i>	February 7, 1962	general	6,131

<u>Vessel</u>	<u>Date Grounded</u>	<u>Cargo</u>	<u>Tonnage</u>
<i>Anubis</i>	July 20, 1908	general	4,763
<i>Pectan</i>	January 21, 1914	ballast	7,318
<i>Liebre</i>	February 28, 1921	oil	7,057
<i>Beulah</i>	1933	ballast	1,389
<i>Aristocratis</i>	December 1, 1949	coal	7,191
<i>Patria</i>	June 21, 1954	coal	7,217

For most of these vessels, fog and storm contributed to their disaster. They all demonstrate the hazards of dead-reckoning navigation in restricted visibility. Five of the vessels included stops at the port of Los Angeles (San Pedro) in the itineraries of their fateful trips. The others were engaged in coastwise traffic between San Diego, Port San Luis, and San Francisco. The vessels not involved with Los Angeles all wrecked on the outer islands of San Miguel and Santa Rosa. Outward bound from Los Angeles, *Liebre* and *Beulah* grounded briefly on Anacapa, while *Patria* and *Aristocratis* made it all the way to Santa Rosa before grounding in the shoals off the east end and at Johnson's Lee.

Five of the vessels regularly carried bulk cargoes. The *Goldenhorn* and the *Crown of England* carried coal, the *Aggi* carried grain, mostly barley, and the *Pectan* and the *Liebre* carried oil. The other vessels carried general cargoes—coffee, plywood, plastic toys, and the like. The *Cuba* carried a large complement of passengers (112), while the *Chickasaw*, primarily a freighter, had four paying customers on its last voyage.

Both the *Chickasaw* and the *Aggi* wrecked as a result of truly bad winter southeasters, while the *Goldenhorn* and the *Crown of England* ran afoul of a combination of strong Davidson Current conditions and heavy fog during the fall.

The losses of these five large ships were all the subjects of investigations and inquiries, most of which fixed the cause of the wreck on sea and weather conditions; in the case of the *Cuba*, the wreck was blamed on the actions of a subordinate officer.

Goldenhorn

1883-1892

Four-masted Bark, Bulk Cargo Carrier

Gross Tonnage	1,914.78 tons
Net Tonnage	1,838.83 tons
Length	268 feet, 6 inches
Beam	40 feet, 2 inches
Depth	23 feet, 7 inches
Decks	two
Official Number	36279
Construction	iron

Historical Record

Russell and Company of Greenock, Scotland, built the *Goldenhorn* for J. R. de Wolf and Son in 1883. Home port for the *Goldenhorn* was Liverpool. The *Goldenhorn* was the second of three sister ships, preceded by the *Matterhorn* in 1882 and followed by the *Silberhorn* in 1884. These three vessels were built to the same plan, with relatively minor improvements effected in the later versions. Originally ship rigged, the

Goldenhorn became a bark by 1886. The *Silberhorn* vanished at sea in 1907; the *Matterhorn* foundered off Umatilla Reef, Oregon in 1909.

The *Goldenhorn* was a typical medium clipper (Lubbock 1927:244), a vessel only slightly slower than the classic extreme clipper ship of the 1850s and 1860s but considerably more capacious. Medium clippers were not as large, however, as vessels constructed later in the nineteenth century. A typical capacity for these medium clippers was 1,800 tons, whereas later vessels ranged up to 8,000 tons (Allen 1978:21). A bark rig, with a fourth (jigger) mast rigged fore and aft, in contrast to the square sails on the three forward masts, improved maneuverability and did not require as large a crew. Ships like the *Goldenhorn* show a workable accommodation of speed, cargo capacity, and ease and economy of operation.

The accounting records, or "cost book," for the *Goldenhorn* have survived and provide detailed information about the specifics of the "No. 60 ship." Five hundred and seventeen blocks of various sizes, all specified, were consumed in rigging the vessel, along with four mast-head trucks, two deep-sea reels, one log reel, and two ship's logs. The *Goldenhorn* came equipped with three Rodger's anchors (Figure 4.1) and three considerably lighter ordinary anchors with more than 200 fathoms of anchor chain. Rodger's anchors, developed about 1830, were stronger than traditional anchors by a virtue of a wood core shank. There were three main varieties of this anchor.

Listed accessories include a 12-inch brass bell engraved "Goldenhorn," a smaller 6-inch bell, four ship's boats, "one handsome cabin stove," a stove for the forecastle, a 6-foot cooking range, lightning conductors, at least 11 compasses, a "brass sounding machine," a

brass foghorn, a brass speaking trumpet, nine gimbeled oil lamps, and a fire engine with hose. There were weapons as well—a 6-pounder line gun on carriage, 25 breech-loading rifles with bayonets, 12 boarding pikes, two Colt revolvers, and appropriate ammunition. Moreover, the list includes handcuffs and leg irons, 12 large rockets, and 12 blue lights for distress signals.

Also detailed are the carpenter stores: cut nails, copper nails, oakum, portland cement, deck bolts, and rivets. Amenities included bedding, cutlery, glass, and crockery. Suppliers equipped the *Goldenhorn* with flags, canvas, medicine chest supplies, mirrors, water casks, buckets (including 10 brass fire buckets), and ropes and hawsers ranging in size from 4-inch steel hawsers to whipping twine and marline.

The iron plates, angles, and bulb stock that compose the ship are listed along with the keel, stem, sternpost, and rudder forgings, 86

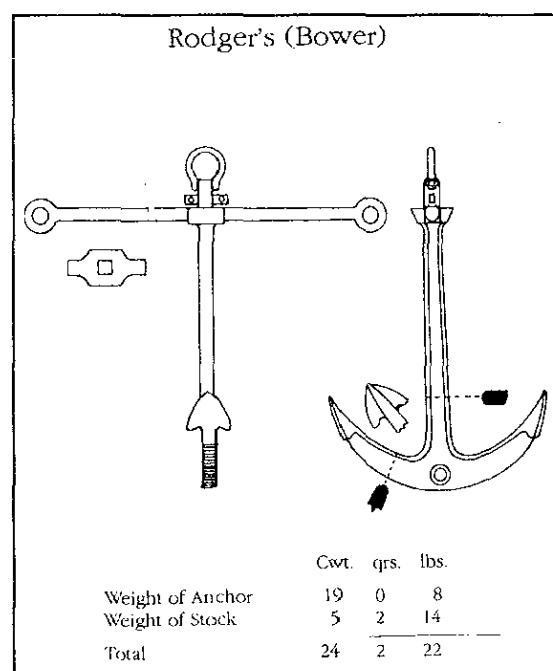


Figure 4.1. Rodger's anchor.

hold stanchions, and eight hold ladders. Rivets are itemized in sizes from 5/8 to 7/8 inch. Tradesmen working on the vessel included fitters and platers, riveters, carpenters, smiths, caulkers, hole borers, joiners, laborers, painters, polishers, and a plumber who installed two single-valve water closets, one hopper water closet, and two iron urinals.

Even an iron ship has many wood components. To build the *Goldenhorn*, 102 logs of yellow pine, 40 logs of teak, and smaller amounts of pitch pine, red pine, mahogany, American elm, "E. Elm," fernheart, veneers, sparring, deals, flooring, and spruce spars were used.

Finally the *Goldenhorn* was launched on January 9, 1883:

As the vessel glided off the ways into her element, she was christened the *Goldenhorn* by Mrs. Roger, wife of one of the Directors of the firm of Russel and Co. . . . There was a large company at the launch and at the cake and wine service afterwards the usual toasts were proposed [*Greenock Telegraph* and *Greenock Advertiser*, 1883].

The cost book records the expenditure of four pounds, sixpence, to "J B Morrisons for luncheon" under the heading "Launch Expenses."

According to *Lloyd's Registry* of 1891, the *Goldenhorn* rated "+00A1," the highest possible rating, and carried a crew of 26. At least one photograph exists of the working vessel (Figure 4.2).

Wreck

On its last voyage, the *Goldenhorn* hauled coal from Newcastle, New South Wales,

Australia, to San Pedro, California, for eventual use by the Southern Pacific Railroad (Haller 1986:29). Although details of previous voyages are unknown, the *Goldenhorn* probably would have departed California with a load of grain for European ports.

The *Goldenhorn* wrecked on offshore rocks along the southwest coast of Santa Rosa Island on the evening of September 12, 1892. Sailing in heavy fog, the vessel was unable to maneuver away from the island when the wind failed and the current carried it to shore. At the board of inquiry hearing held later in the month, Captain Dunn stated that by dead reckoning he placed himself 15 miles from the east part of Santa Rosa Island. Land was seen at 6:00 P.M. and was estimated to be 14 miles away. Driven by a strong current and a heavy swell and hindered by dense fog, the vessel struck at 8:10 P.M. (LAT, September 20, 1892). It struck bow first, although by the time the crew had taken to boats, "she was completely gutted aft." After the vessel struck, soundings showed 6 fathoms on the port side and 4.5 on the starboard (LAT, September 20, 1892). The crew abandoned all personal effects on the vessel, eventually rowing to Santa Barbara via Becher's Bay in the two 25-foot ship's boats (SBMP, September 15, 1892).

When the British vice-consul in Los Angeles, Mr. Mortimer, arrived at Santa Barbara to head the board of inquiry, he "paid off the men of the *Goldenhorn* giving each man his choice to either stop at Santa Barbara or be sent to the nearest port where he would be likely to find an opportunity to ship home" (LAT, September 16, 1892). A week later the *Times* reported: "A petition is in circulation to raise a purse for Captain Dunn of the wrecked vessel *Goldenhorn*. The captain lost everything in the loss of the vessel" (LAT,

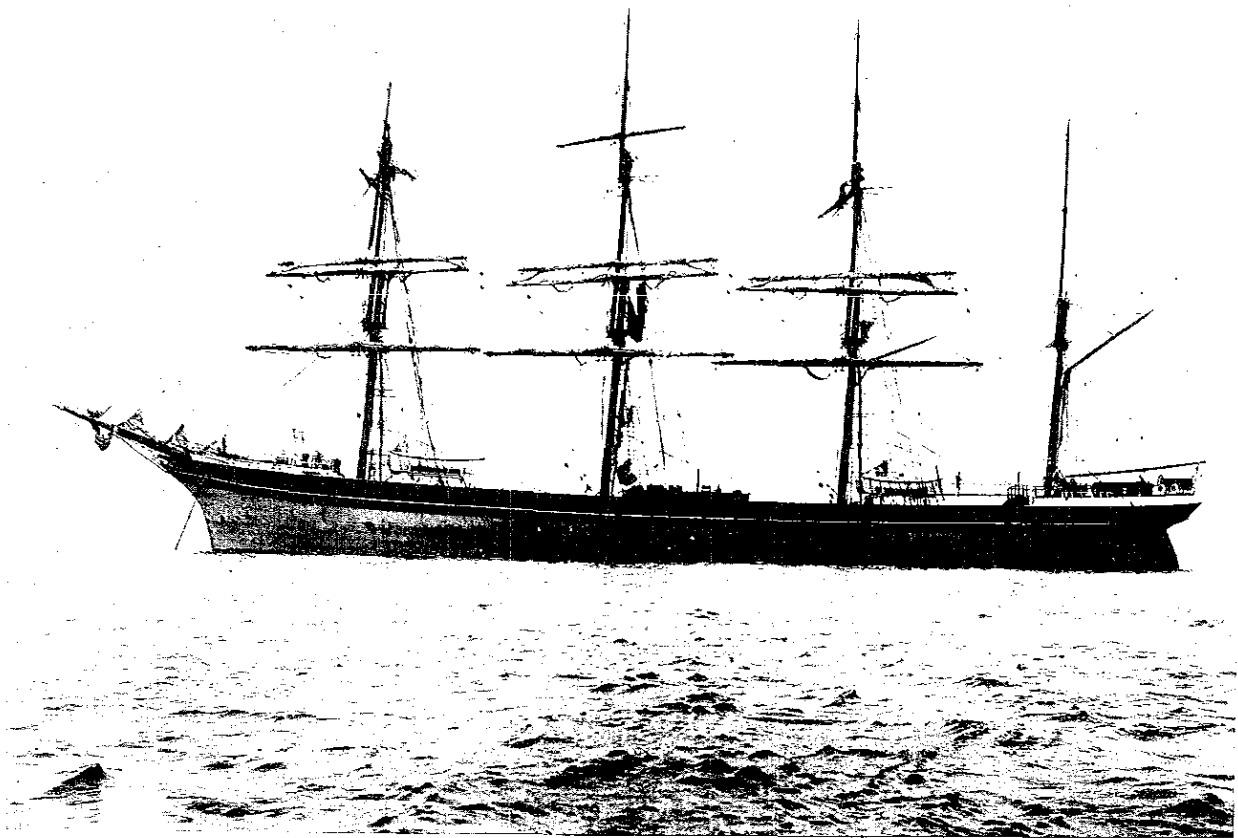


Figure 4.2. *Goldenhorn* at anchor, unknown location. Photo by W. A. Scott courtesy, of San Francisco Maritime NHP.

September 23, 1892). A local tradition holds that several of the crew settled in the Santa Barbara area (Wheeler and Kallman 1986), although local newspapers record that all the crew left town a few weeks after the wreck.

At the board of inquiry hearing, four members of the crew, including the first and second mates, corroborated the captain's statements and testified that the "influence of liquor" was not a factor in the wreck. The board exonerated Captain Dunn and the crew, calling attention to strong uncharted currents in the area.

The very evening the shipwrecked crew of the *Goldenhorn* arrived in Santa Barbara, the

schooner *Genovia* set out for the wreck, returning two days later with the report that "her stern is caved in and the upheaval of the cargo has splintered the deck in many places and the whole aspect is one of ruin and destruction." Some salvage is known to have occurred. The schooner *Ruby* brought back some rigging saved from the wreck on September 20 (LAT, September 21, 1892), reporting that the vessel was broken in two between the fore- and mainmasts. By September 22, all the crew but the captain had departed Santa Barbara (SBMP, September 22, 1892). By September 25 (LAT), the wreck had been sold to a San Francisco firm

and the *Ruby* had returned with three anchors, ropes, and sails from the wreck. Some of the proceeds of the sale of these items were going to help the unfortunate Captain Dunn. Soon a salvage tug from San Francisco blew up some of the hull with powder and presumably salvaged the scrap. The *Santa Barbara Morning Press* reported on November 2, 1892, that the vessel had "completely collapsed."

Although the vessel was abandoned quickly, the published sources clearly show that the wreck was visited on numerous occasions and that many items were removed, mostly those that were easily recovered and broadly useful. We can be sure much equipment came off the wreck that was not mentioned in the newspaper accounts. Structural material may have been removed in 1894 when the *San Pedro* worked the wreck of the *Winfield Scott* and the *Gosford* at Point Conception.

Archeological Record

The wreck scatter of the *Goldenhorn* (Figure 4.3) lies in relatively shallow water off the southwest coast of Santa Rosa Island, surrounded by rocks and shoals that pose a significant hazard for vessels attempting to anchor directly over the broken vessel. Wave action has flattened and shattered the vessel's hull and ground it down into prominent rocks. When mapping of the wreckage began in 1985, Bill Yznaca, captain of the *Truth* at that time, commented that what the charts show as a wash rock in the vicinity of the *Goldenhorn* may have been a portion of the wreckage that was among the last to be flattened.

It is clear that portions of the wreck have slipped away during the years. Absent are brass and other yellow metal fittings in places where such items should occur, such as the cap of the anchor capstan near the bow of the

vessel. Glenn Miller, who discovered the wreckage in the 1960s, recovered brass nameplates from the vessel that gave its identity (Don Coelho, personal communication). Much anchor chain is missing, among other items. Yet a great deal of all parts of the vessel remains, including quantities of the wire rigging.

The largest single piece of the vessel is an 83-foot section of bottom hull, which is virtually flat, with no noticeable deadrise. The hull is broken at the turn of the bilge on both sides. There is an I-beam centerline keelson, two side keelsons of T-bulb bar stock, and two bilge keelsons constructed of the same material as the side keelsons. The side keelsons have intercostal plates; the centerline and bilge keelsons do not. The floor frames (Figure 4.4) are on 2-foot centers, and hull stanchion sockets are located on every fourth frame, either between the centerline and side keelsons or between the side and bilge keelsons. A mast step, probably for the jiggermast (Figure 4.5), is set on the centerline keelson.

To the west and farther offshore in slightly deeper water are fragments of the stern. The stern section lies on its starboard side with the jiggermast step and hold stanchion on the centerline keelson. Floor frames remain below the keelson, still fixed to the solid keel of the ship. The presence of the mast step indicates this section of the vessel is from that portion of the hull forward of the deep floors that are just forward of the sternpost. The rudder post with the bow of the rudder, rudder trunk, stuffing box, and tiller attached lie near the stern hull section. The rudder was apparently wood with an iron frame (Paasch 1901).

Close by is the patent steering gear, minus the wheel, which is said to have been removed by divers. In the cost book, this is described

GOLDENHORN

Four-masted British Bark

Wrecked: 1892

SANTA ROSA ISLAND, CALIFORNIA
CHANNEL ISLANDS NATIONAL PARK

Surveyed: 1985

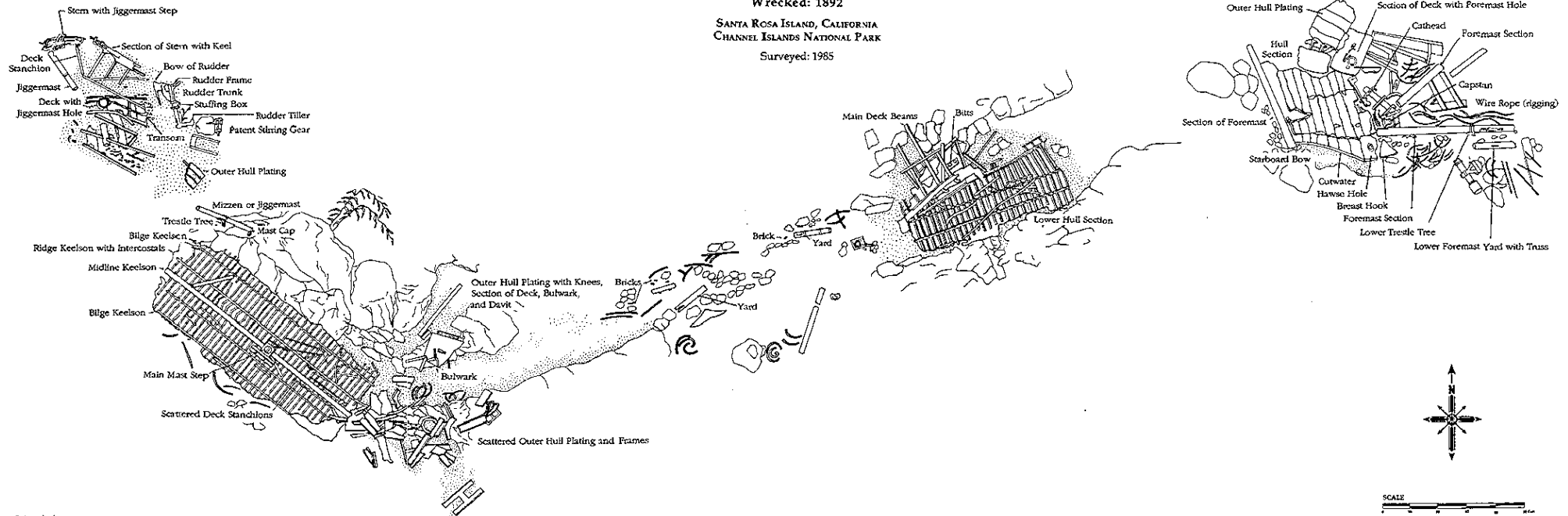


Figure 4.3. Wreck scatter of the *Goldenhorn*. Mapped by Jim Bradford and Jerry Livingston; final rendition by Carol Vesely and Susan Morris.

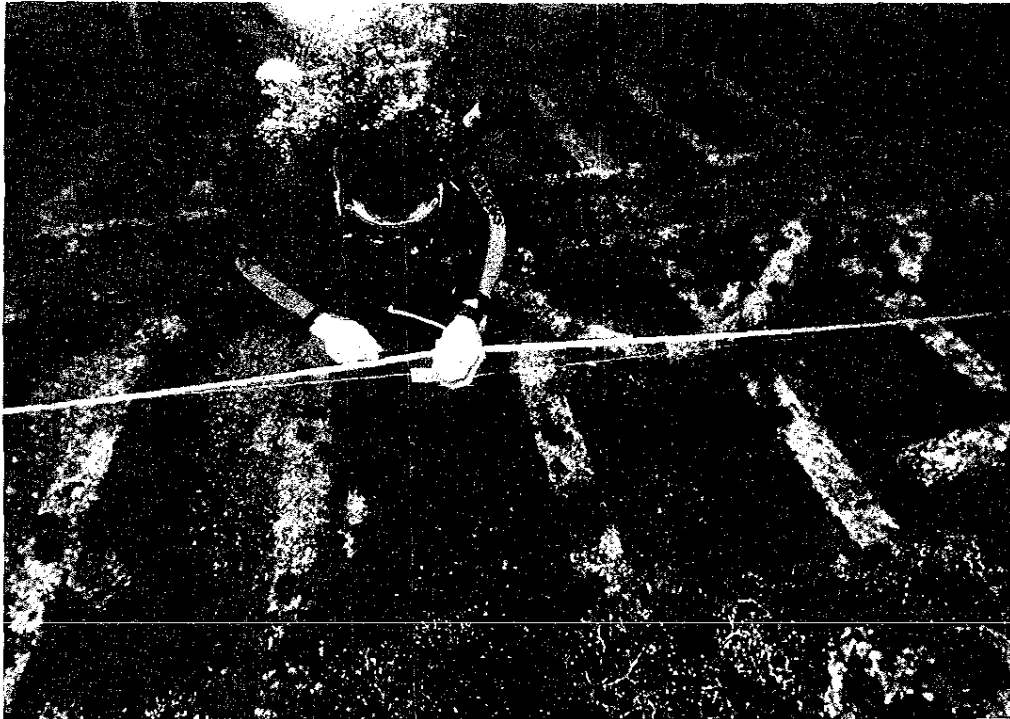


Figure 4.4. Floor frames on the *Goldenhorn*. NPS photo by Larry Murphy.

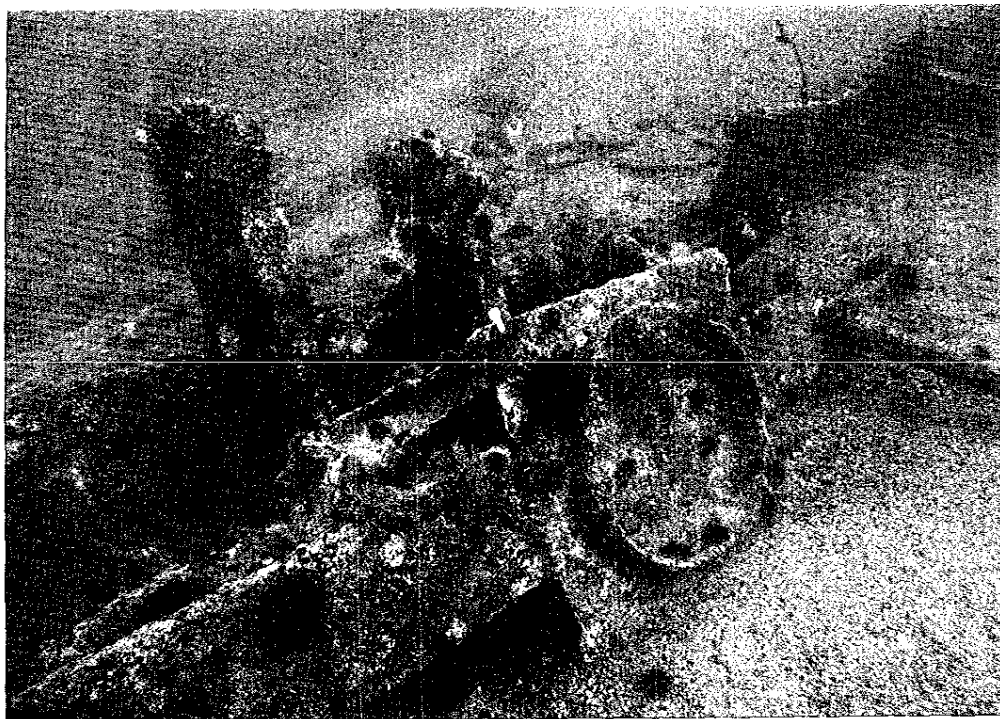


Figure 4.5. Jiggermast step of the *Goldenhorn*. NPS photo by Larry Murphy.

as "one set improved screw steering gear having spindle 5 inch diameter Mal iron crosshead, cast iron backstand and topper with black connecting rods, brass bushing backstand and swivel bush." There are also fragments of iron decking and boat davits in the area. Except for 20 to 30 feet of collapsed bow, no more hull bottom appears, other than the major piece discussed above, so about half of the hull bottom of this vessel has been found. Most of the missing hull would have been forward of the mainmast, the very area where the vessel broke initially. About 130 feet of hull side occur in the mapped wreckage. Roughly 430 feet of hull side remain unlocated.

A 60-foot section of port side hull lies in slightly shallower water inshore and east of the main piece. There are two stringers between the bilge line and the main deck level. The two stringers are constructed similarly to the side keelsons. The side frames are channel bar stock. This piece of hull side contains attached deck beams and deck shelf. There are diagonal tie plates of flat stock above the deck beams. The main deck was open or possibly decked with wood. There is also a hull section that could be from the starboard side of the vessel. A 12- to 15-foot section contains articulated knees, deck, bulwarks, and cap rail. This section appears broken at the main deck level.

In this general vicinity, probably near the location of the galley, a number of bricks can be found. One brick, recovered from a wreck thief in 1987, bore the inscription "Glenboig," identifying it as a product of the Glenboig Brick Company in Glenboig, Scotland, a small community near Glasgow (Gurcke 1987). Surprisingly, no fire bricks are listed in the cost book for the *Goldenhorn*, nor is there a record of any transaction with the Glenboig Brick Company. Perhaps these bricks were

incorporated into the "galley stove, complete" that was installed in the vessel. Mortar adhering to these bricks indicates that they were part of the vessel and not simply cargo.

Still farther inshore lies the bow section with the cutwater laid over with the starboard side of the bow turned up, clearly showing a single port side hawsehole. This is the most evident piece of exterior hull plating extant in the wreckage. Nearby lies one of two capstans mentioned in the cost book. Prominent here are three large fragments of the foremast, including the lower trestle tree and the lower yard with truss (Figure 4.6). Also present is one of the catheads and an iron section of deck with a hole for the foremast.

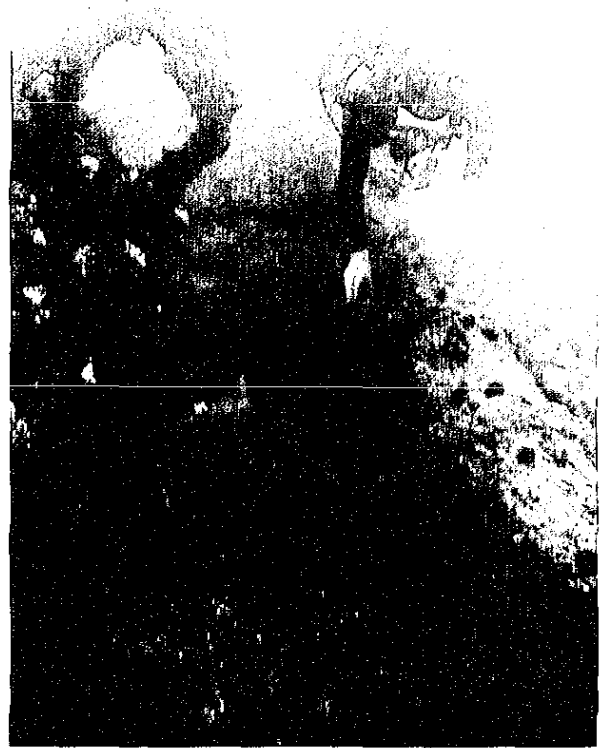


Figure 4.6. *Goldenhorn's* mast, truss and lower yard. NPS photo by Larry Murphy.

Considerable wire rigging remains snarled and tangled about the wreck, along with fragments of masts. Yards occur in the vicinity of all masts except the jigger. A boom for this mast was not located, nor has the fourth mast or its step been found. Given what we know about salvage activities just after the wreck, it is likely that the jigger boom was removed, as it would have been readily usable on local schooners.

Additional material from the *Goldenhorn* has turned up along the nearby shore of Santa Rosa Island as a result of recent archeological surveys. A prominent stockpile of coal perches on a coastal terrace 1 kilometer southeast of the main wreck scatter. The individual pieces of coal are rounded by wave action, which would have occurred as the cargo spilled out of the vessel and tumbled onshore. This stockpile lies close to black abalone shell middens and two other stockpiles of lumber, all suggestive of Chinese-American abalone fishing activity. Since Chinese fishermen used long tongs to obtain abalone, it would have been a very simple matter to grab the new fuel source represented by the *Goldenhorn's* cargo. The timbers in these two stockpiles also seem to derive from *Goldenhorn*. They are fresh and unworn, still containing patches of paint. Plugged fastener holes suggest that most of these pieces are wooden trim. Two pieces are fragmentary hatch covers. They match hatch covers laid down for a platform at another site on the island about half a mile away.

Crown of England
1891-1894
Cargo Steamship (Collier)

Gross Tonnage	2,574 tons
Net Tonnage	1,608 tons
Length	297 feet
Beam	40.1 feet
Depth	19.0 feet
Decks	one
Official Number	99115
Construction	steel and iron

Historical Record

Quite new at the time of its demise, the *Crown of England* contained many modern features, not the least of which were its triple-expansion engines manufactured by Blair & Company, which could develop 200 horsepower. Richardson, Duck and Company, Stockton, England, built the vessel with web frames designed to hold water ballast and a partial awning deck 176 feet long above the main deck. Lloyd's rated it at "+100A1," the highest possible rating (*Lloyd's Registry* 1892-1893).

Registered at Belfast, the *Crown of England* was executing a 6-month contract to haul coal from Nanaimo, British Columbia, to San Diego, California, in 1894. The vessel finished discharging cargo on November 5 and departed the following day in ballast on the return trip. Thick fog restricted visibility and no navigational fixes were available after

leaving port. The captain navigated on dead reckoning throughout the voyage, attempting to follow a course that would take the vessel outside, or south of the Channel Islands.

Although a lookout was maintained and speed was cut in half to 4 knots at 15 minutes before midnight, the vessel struck rocks just as the watch spotted them and gave the alarm. Reversing the engines merely caused the vessel to settle deeper. Over the next few hours, the waves and current pivoted the vessel to starboard, or east, tearing large holes in the starboard hull. As day broke, the crew could at last determine that they were on an island, rather than on an isolated rock. The vessel had wrecked at Ford Point on the south coast of Santa Rosa Island. A search of the island during the day by crew members failed to locate any inhabitants. Eventually, first officer John Poole and a crew of five rowed to Santa Monica, giving word of the wreck after arriving on the morning of November 11 (LAT, November 22, 1894).

The tug *Fearless* departed San Francisco and reached the scene on November 15, finding the *Crown of England* in very bad condition. The *Times* described it as:

A total wreck. She lies broadside against the shore and her bottom is full of holes made by pounding on the rocks. When Capt. Haskell [skipper of the *Fearless*] visited her . . . he could put a plank from the shore to the steamer's bow and walk aboard. . . . It will take a very short time to break the vessel in pieces [LAT, November 16, 1894].

A court of inquiry into the accident convened at Santa Monica on November 20, headed by the Honorable C. White Mortimer,

British vice-consul, who had also performed this role for the *Goldenhorn* wreck. The court heard from Captain John Hamilton, First Officer John Poole, Second Officer James McGeorge, First Engineer Robert McHaffey, Third Engineer John Clark, and seamen Michael McLaughlin and Emil Smith, who had been helmsman and lookout, respectively, at the time of the grounding (LAT, November 22, 1894).

Captain A. Smith of San Pedro discussed the erratic nature of currents around the islands and the fact that sailors find strong currents running in the opposite direction. He blamed the accident on this contrary current and stated he would have followed the same course as Captain Hamilton because "a fog never stops the steamboat" (LAT, November 21, 1894).

The final witness, Second Officer E. O. Parsons of the passenger steamer *Corona*, gave the board the following graphic description of what was surely a fully developed Davidson Current:

On the boat's voyage to San Diego, undertaken November 2, it encountered a strong current, tending northward, which was estimated . . . to flow two and one-fourth knots per hour, and from Port Harford [San Luis Obispo] to Santa Barbara it retarded the boat from the usual running time of less than nine hours to more than nine and a half. It was noticed as particularly strong off Santa Barbara Islands. While at San Diego defendant went on board the *Crown of England* to warn the Captain of the current, but did not find him on board. The *Corona* left San Diego November 5th and ran in a current all the way to San Francisco. It was so

strong a current that from Port Harford to the Cliff House, San Francisco, it ran the boat ahead of her log twelve and one-fourth miles.

A strong Davidson Current would have set the *Crown of England* toward Santa Rosa Island on the outside track that Captain Hamilton was attempting to steer.

By the end of the month, plans were afoot to salvage the vessel, as the Lloyd's surveyor had reported the cost of towing the vessel to San Francisco excessive. The California Iron and Wrecking Company, despite having recently lost its salvage vessel *San Pedro* while working on the wreck of the *Gosford* at Point Conception, entered into an agreement to break up the *Crown of England* and bring the wreckage to San Francisco. In early December, matters apparently were progressing well:

Henry J. Rogers of the California Iron and Wrecking Company, arrived here yesterday afternoon on the tug *Katie O'Neill* from Santa Rosa Island where the company has three boats and about forty men engaged in saving the machinery from the wrecked steamship *Crown of England*. He reports good progress. They have already recovered the main engines, steam hoists, steering gear, anchors, chains, and a great deal of other valuable material. The schooner *Annie* is being loaded with the machinery and if good weather continues, will be able to carry a large cargo to San Francisco. After the machinery is carefully removed, the vessel will be broken up and all the iron saved [SBNP, December 5, 1894].

Judging from the wreck site of the *Crown of England* today, that is exactly what happened. The loss of the *San Pedro* may have been of no consequence to the salvage company in this operation, as the *Crown of England* was so close to Ford Point that salvage could proceed easily from the island.

Archeological Record

Ford Point is a low, gently rounded peninsula on the south side of Santa Rosa Island. It provides one of the few flat locations along this stretch of coast, and a small sandy bay immediately to the east provides an excellent landing spot.

For years Ford Point has been distinguishable by the presence of a steam donkey engine (Figure 4.7) from the *Crown of England* on the seaward edge of the terrace. At one time the top of the boiler of this engine was even marked as a U.S. Coast and Geodetic benchmark. Apparently the salvagers had moved the donkey engine ashore and employed it for hauling salvage material from the wreck.

Next to the engine lie two spars, each suitable for service as a stiff leg or boom to move material ashore. Fragments of thick wire cable, often with spliced eyes, poke up through the usually thick grass near the donkey engine. Inland sits a massive iron stove, certainly from the galley of the *Crown of England*, on a level area of the terrace that would make an ideal camp site for the salvage crew. These artifacts are all remnants of the salvage operation carried out on the *Crown of England* during the winter of 1894.

In May 1990, Dr. Bruce Hector and the senior author spent three days mapping the visible artifacts. Reasoning that the grass

concealed many smaller items, Hector brought along a metal detector. Some metal pieces were located in the intertidal zone with the metal detector while the team was skin diving in the area from the donkey engine around Ford Point to the sandy beach just to the east.

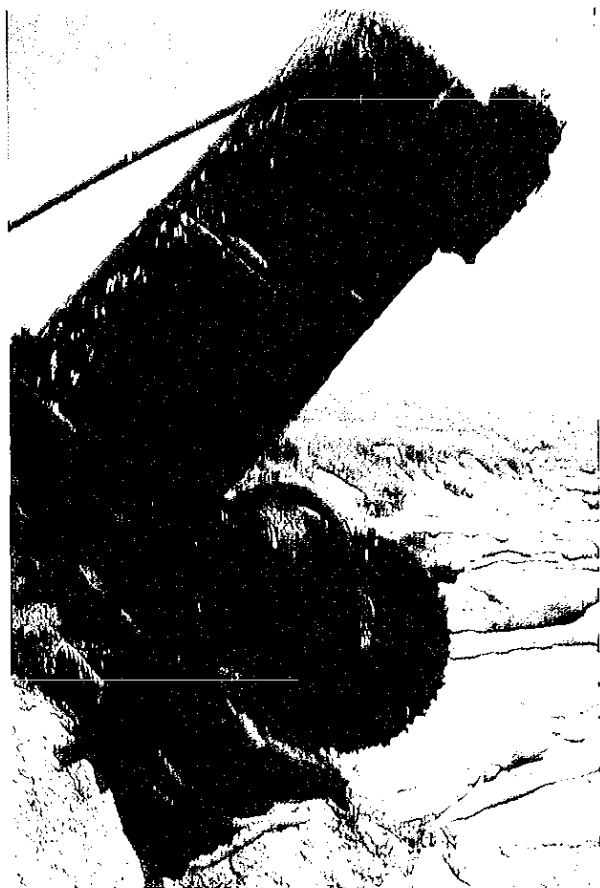


Figure 4.7. This rusting donkey engine is the most obvious remains of the steamship *Crown of England*, Ford Point, Santa Rosa Island. NPS photo by Don Morris.

In addition, the area offshore has been searched whenever possible by teams in scuba gear or by what is jokingly called the BAIT technique—"Buoyant/Bewildered/Beginning (Choose at Least One) Archeologist in

Tow"—which utilizes an inflatable boat to tow an investigator in snorkel gear over a search area. The water in the vicinity of Ford Point does not exceed a depth of 40 feet, so diving is relatively simple, but the area near the donkey engine is frequently very rough, particularly when the south swell is running. Diving close to shore, where most of the wreckage located so far has been found, is often impractical.

The largest piece of wreckage is a very large anchor lying at about 30 feet deep, with associated anchor chain extending straight offshore from the donkey engine. Closer in to the shore lies a 10-foot piece of tubular pipe about 8 inches in diameter, along with three or four L beams and some small pieces of steel plating. No large pieces, such as frames or the keelson, of the *Crown of England* remain in the area.

On shore, the area along the edge of the terrace contains small pieces of steel plating and fragments of steel rivets. The area around the galley stove yielded, in addition to pieces of the stove itself, glass, crockery, the one metallic cartridge found, and some wire insulators that appear to be radio gear dating from the 1930s and 1940s. All of this material suggests camp debris, as opposed to the stockpile of salvage material clustered near the shore. A trail of bolts and scrap leads from the area near the donkey engine northeast to a steep slope that leads down to the eastern beach. This would be a logical place from which to load the salvaged scrap, because the surf is much less turbulent here. A few pieces of iron plate located by the metal detector offshore from this beach probably represent small pieces that fell off during removal to a ship anchored offshore.

Anubis
1898-1908 +
Cargo Steamer

Gross Tonnage	4,763 tons
Net Tonnage	3,897 tons
Length	382 feet
Beam	48.2 feet
Depth	26.2
Decks	two
Official Number	---
Construction	steel

Historical Record

J. L. Thompson & Sons of Sunderland, England, built the *Anubis*, ex-*Luciana*. The Kosmos Line of Hamburg, Germany, owned and operated the ship. A triple-expansion engine powered the vessel, which had electric lighting (Haller and Kelly 1987).

On the trip during which the *Anubis* grounded on San Miguel Island—a passage from Tacoma, Washington, to Hamburg—the vessel had already experienced misfortune. In San Francisco, three crewmen were detained by United States authorities for an assault on Chief Officer Johannes Dohrn; and while departing San Francisco, the *Anubis* missed colliding with the steamer *Cecil* by a mere 10 feet (*San Pedro Daily Pilot*, July 21 and July 30, 1908). More was to come.

On July 20, 1908, the vessel stranded near San Miguel Island, off course due to a faulty compass and fog. Some early newspaper accounts and one of the two wreck reports for the *Anubis* located the wreck site "on a reef of death between Santa Rosa and San Miguel Islands" (*San Pedro Daily News*, July 21, 1908), but the stranding actually occurred between Castle Rock (Flea Island) and San Miguel Island. The *Anubis* grounded less than

2 miles away from the lumber schooner *JM Colman*, which wrecked three years earlier.

The *Anubis* struck the rock at 12:15 o'clock Monday morning, while running at eight knots through a heavy fog. For a mile before the disaster, the keel moved through a bed of kelp. Captain Von Salzen was asleep at the time. He had left word that he should be called if fog was encountered, but this order was disobeyed. . . . The accident is directly attributable to the fact that the ship's compass was defective. . . . There was a panic on board following the crash as the crew thought there had been an explosion of dynamite, a large quantity of which was stored in the hold. A few pieces of this did explode, but did no damage as compared with that which followed the terrific impact of the ship against the rock [*Los Angeles Examiner*, July 23, 1908].

Captain Von Salzen, once he had decided that the vessel was hard aground, dispatched First Mate Dohrn, Third Mate Karl Loewe, and seven seamen to seek help. The lifeboat landed at Point Conception, wrecking in the surf. The lighthouse keeper there telegraphed for tugs from San Francisco, San Pedro, Redondo, and Port Harford [San Luis Obispo] (*San Pedro Daily News*, July 22, 1908). Several vessels responded, including the *Charm*, from "Vaviota" (Gaviota, near Santa Barbara), the *Redondo*, from Redondo Beach, and, eventually, the revenue cutter *Manning*.

First reports stated that the *Anubis* would be a total loss. Only Captain Von Salzen remained aboard the wreck while the rest of the crew camped on Flea Island, about three-quarters of a mile to the southwest of the

wreck. Kelp surrounding the vessel hindered access by rescuers. Quantities of the varied cargo were jettisoned in order to lighten the vessel. The cargo included 4,000 tons of barley, tallow, salmon, syrup, dynamite, lumber, rice, machinery, and sacks of flour—the latter "thrown over to lighten the vessel, and this white burden has drifted for miles around" (*Los Angeles Examiner*, July 23, 1908). This evidently is the flour that the rancher on San Miguel salvaged and used for many years (Roberts 1978:112). Other inhabitants of the islands used this flour as well, and some bags were resold on the mainland (Eaton 1980:53-54, 78).

By July 25, the steamer *San Diego* had returned to San Pedro with 600 sacks of flour from the *Anubis* (*Los Angeles Herald*, July 26, 1908). Other vessels, including one under the command of Captain Ira Eaton, removed about 1,800 tons of cargo by the end of the month. Apparently the swelling of sacked barley in the lower hold sealed some of the holes opened up in the grounding. *Anubis* was pulled off the rocks, repaired temporarily in Cuyler Harbor, and returned to San Francisco by the tug *Goliath* by August 17.

The accounts of the stranding of this vessel are particularly specific about the quantities of material thrown overboard to refloat the ship. Much of the jettisoned cargo was material that would have floated away or not survived. Heavier material, however, such as the "machinery," is likely to remain near the location of the stranding, particularly since the rough, rocky sea bottom in this area would not allow movement or subsurface subsidence of heavy items. Spare ships stores, particularly heavy items such as anchors, could also be anticipated in the area. Divers have not yet examined the area for any wreckage or debris from this incident, and none is known to be attributed to this grounding.

Pectan
1902-(1914)-1942
Oil Tanker

Gross Tonnage	7,318 tons
Net Tonnage	4,770 tons
Length	471 feet
Beam	55 feet
Depth	32.9 feet
Decks	two
Official Number	212911
Construction	steel

Historical Record

When built by Shell Oil Company, the British vessel the *Pectan* was one of the larger tankers of its day, carrying 83,000 barrels. In photographs, the *Pectan* (Figure 4.8) presents a typical three-island steamship profile with forecastle, amidships, and stern cabins projecting above the main deck. Its amidships bridge and single funnel indicate an amidships engine room with the propeller shaft running beneath the aft hold. A single propeller and rudder show prominently in three photographs. One photo shows a catwalk above tank hatches that connected the forecastle and bridge. The *Pectan* carried both tanker and conventional cargoes and was so designed by the original owner, Shell Oil. Previously, the *Pectan* had gained fame for towing the British battleship *HMS Victorious* from a sandbar in the Suez region (Dunn 1979:40).

Under circumstances that are not too clear, the *Pectan*, then owned by Union Oil, plowed into the sand at Adams Cove, Point Bennett, San Miguel Island, within a mile of the *JM Colman* and the future resting place of the *Cuba*. The *Pectan* was proceeding in ballast from Taltal, Chile, to Port San Luis (San Luis Obispo, California) to acquire

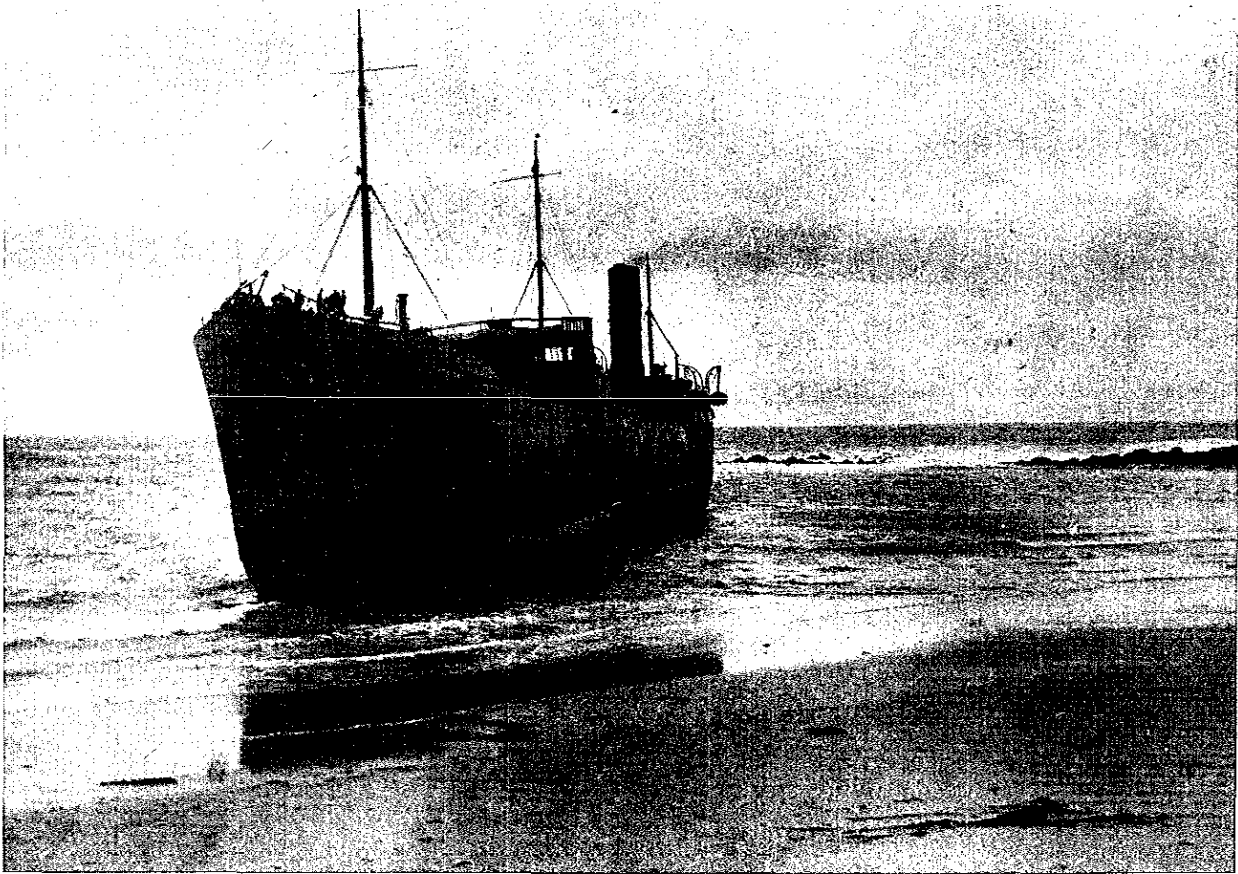


Figure 4.8. *Pectan*. Photo courtesy of San Francisco Maritime NHP.

cargo. Either misnavigation or foggy weather led it to stray onto the beach on January 21, 1914, at 9:30 P.M. Newspapers reported significant storm damage around southern California around that date, so fog and stormy weather probably played their usual role in grounding the *Pectan*.

Apparently suffering no damage (LAT), the *Pectan* rested easily while waiting for a high tide on February 10, when it was able to extricate itself unassisted. In the interim, several vessels assisted in the rescue. Using the wireless, the *Pectan* summoned the *Argyle* and the *Lansing*, also Union Oil tankers, to its aid. Soon involved were the salvage steamer *Iaqua* and the tug *Dauntless*, as was the revenue cutter *USS Manning*. In attempt on

January 26 by the *Argyle*, the *Lansing*, and yet another steamship, the *Whittier*, to reach the *Pectan* with a tow line met with no success.

On February 1, the *Dauntless* steamed to Ventura for fresh water and food for the *Pectan*'s crew of 49, with the announced plan of waiting for the high tide of February 10 (LAT, February 2, 1914). The final report on the *Pectan* (LAT, February 12, 1914) relates that the vessel pulled itself off without any assistance and "proceeded north to have her hull thoroughly inspected before returning to Port San Luis for reloading."

By 1918, having been renamed the *Coalinga*, the vessel passed to American registry and the ownership of the Union Steamship Company, whose home port was

San Francisco. Years later, bearing the Italian registry and name *Lucania*, the vessel was sunk by a British submarine in February 1942.

The descriptions and photographs of the vessel's situation clearly show that the *Pectan* grounded in Adams Cove, which, while still sandy today, is hardly devoid of rocks. A factor that may have aided the *Pectan* was the copious quantity of sand on the beaches of San Miguel, supplied by the extreme erosion on the island. Indeed, the *Los Angeles Times* (February 12, 1914), in discussing this incident, states, "The once green island is now a white bleak stretch of sand eight miles long and a mile and a half wide, with only a few green places where the grass as yet exists." In recent years, the beaches on the island have shrunk as revegetation has slowed erosion.

Although the *Pectan* did not wreck on San Miguel, there may be considerable debris in the area where it lay grounded for 18 days, either from deliberate attempts to lighten the vessel or from inadvertent losses.

Aggi

1894-1915

Three-masted, Full-rigged Ship

Gross Tonnage	1,898 tons
Net Tonnage	1,756 tons
Length	265 feet
Beam	39.1 feet
Depth	23.3 feet
Decks	one
Official Number	102136 (as <i>Aspice</i>)
Construction	steel

Historical Record

Under the Norwegian ownership of B. A. Olsen and Son since 1911, the steel-hulled *Aggi* (formerly named *Seerose*, *Sant' Erasmo*, and *Aspice*) had been built in Glasgow, Scotland, by Mackie & Thomson in 1894 (Figure 4.9). As the *Aspice*, it had been owned by R. J. Swyny of Liverpool and by T. Law and Company of Glasgow; as the *Sant' Erasmo*, its home port was Genoa, Italy, where it was operated by Nav. Gen. Italiana; and as the *Seerose*, was operated by T. and F. Eimbcke of Hamburg, Germany. The Lloyd's rating was "+100A1," indicating eminent seaworthiness (Figure 4.10).

Constructed 11 years after the *Goldenhorn*, the *Aggi* was built of steel rather than iron. Steel offered a better weight-to-strength ratio and increased cargo capacity at the expense, some said, of lessened durability and longevity in salt water. Steel, being lighter for a given strength than iron, produced a more efficient cargo carrier with stronger masts and spars, and its use improved the economic position of sailing vessels. The same improvement in metallurgy that produced cheaper, stronger steel for sailing vessels also led to the development of higher pressure boilers, the triple-expansion steam engine, and the perfection of steamships that eventually eased sailing ships out of commercial service (Greenhill 1980:43-44).

The *Aggi* departed San Francisco on April 29, 1915, under tow by the steamer *Edgar H Vance* for the Panama Canal, with the plan of sailing independently from the canal to

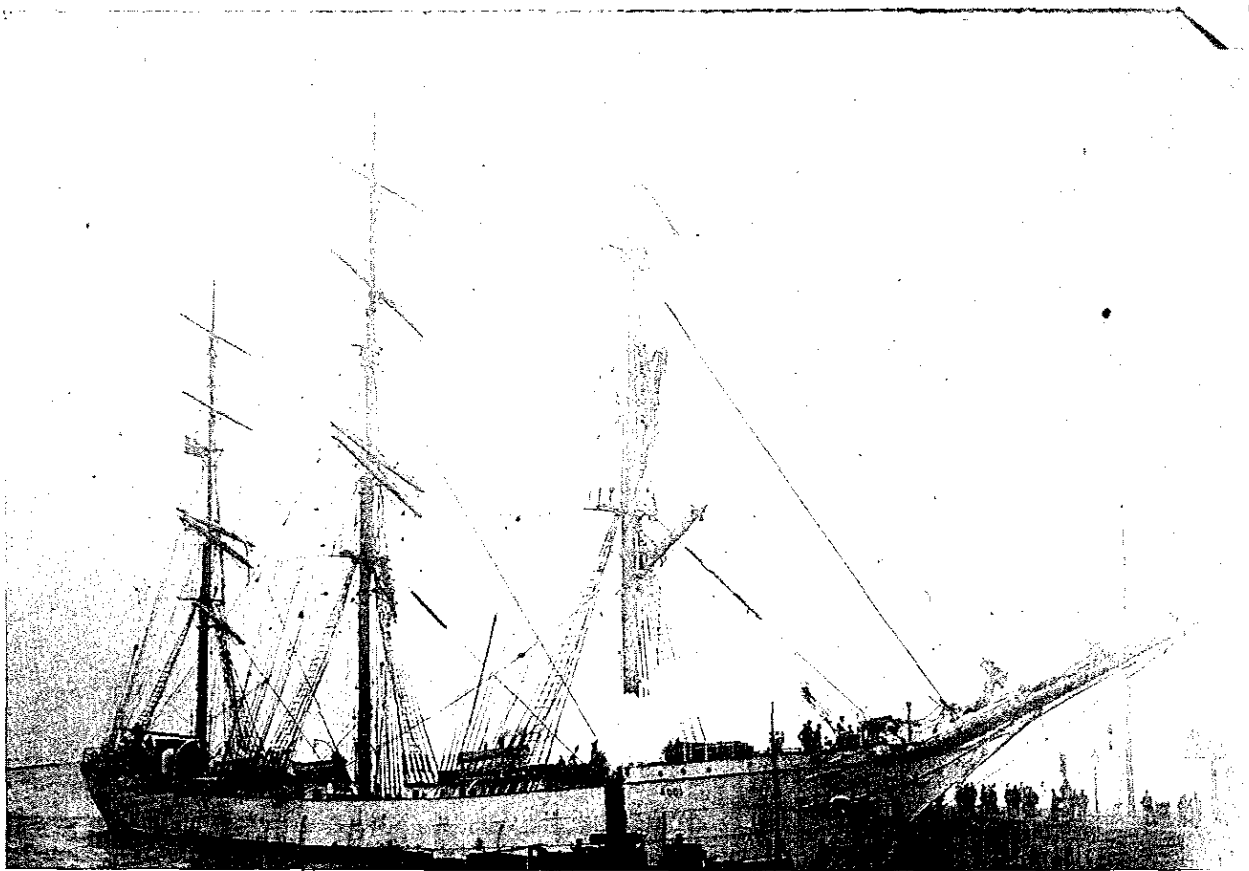


Figure 4.9. *Aggi* at the dock. Photo courtesy of the Monterey Maritime Museum.

Malmo, Sweden, with a cargo of 2,500 tons of barley and 600 tons of beans (Fouts 1989:4). The two vessels encountered a severe storm that parted the towing cable the following day. The *Aggi*'s cargo shifted as the storm reached its height, putting the lee rails under water and submerging half the bunks in the forecastle. The crew could not maneuver the vessel properly in this condition and, despite attempts to reach the city of Santa Barbara, the *Aggi* fetched up with great force on Talcott Shoals, 1 mile from the west end of Santa Rosa Island, at 3:30 P.M. on May 3, 1915.

The *Edgar H Vance* also encountered severe difficulties in the storm, limping back into San Francisco on May 5 with a jury rudder and assistance from the tugs *Navigator*,

Rover, and *Dauntless*.

The summary of the maritime declaration following the wreck of the *Aggi* states:

Aggi (WJBM) of Lyngor sailed from San Francisco on April 29 [1915] under tow to sail through the Panama Canal. Very soon a storm broke out and the cargo was displaced and the towing rope was broken. The ship got a leak and tried to get to Santa Rosa Island as a harbor of refuge. In the entrance, the ship grounded on May 3 on a ground not marked on the map, leaked full of water, and was totally wrecked. The crew saved themselves in the ship's boats. The maritime declaration was held in San Francisco

May 10 and legal investigation in Tvedestrand July 16. Result—cause of the wreckage was stormy weather and the case was dismissed [Norwegian Archives].

Haller provides further ominous details of the last voyage, including the desertion of the ship's cat at the beginning of the voyage and the death of the cabin boy during the voyage to San Francisco.

Articles in the *Los Angeles Times* provide follow-up details of the crew's efforts to reach Santa Barbara after establishing a temporary camp on Santa Rosa Island. Salvage of at

least two large and five small anchors from the vessel is mentioned (Fouts 1989:7). Although only a small amount of cargo was retrieved, many fittings and other small portable items were saved.

The vessel played its final role as a movie set for the Universal Film Company. The earliest film crew, from Flying-A Moving Picture Studios, attempted to film the wreck less than three weeks after it happened, on May 24, 1915 (Fouts 1989:6). Grandiose plans to utilize the wreck as a centerpiece in several other films came to nothing, although a company of six Universal Film stars actually visited the wreckage. Only a small amount of



Figure 4.10. *Aggi* in a different color scheme, presumably under an earlier owner. Photo courtesy of the Monterey Maritime Museum.

film was exposed, due to stormy conditions (Fouts 1989:8). Fouts states that the company, which included silent stars Grace Cunard and Francis Ford, camped out on Santa Rosa Island at a spot 6 miles distant from the *Aggi*. Although it seems more reasonable that the company would have stayed in Cuyler Harbor on San Miguel Island, which is also 6 miles from the *Aggi*, newspaper articles are specific that Universal executives went over to the "camp on Santa Rosa Island" that was "distant about six miles from the wreck . . . in one of the few good spots for camping that this part of the island supplies" (SBMP, May 18,

1915). The camp might have been located at the mouth of Arlington Canyon, Cañada Verde, on the north coast, or possibly at China Camp on the south side of the island.

Smuggler's Island, starring Cunard and Ford and produced by Universal, may contain footage from the location of the *Aggi*. A 1915 Universal newsreel may also have the *Aggi* footage. Attempts to locate film exposed on the wreck have been unsuccessful.

Glenn Miller, a dive boat operator, discovered the wreck for scuba divers during the 1960s. He removed one of the anchors, donating it to the Santa Barbara Historical

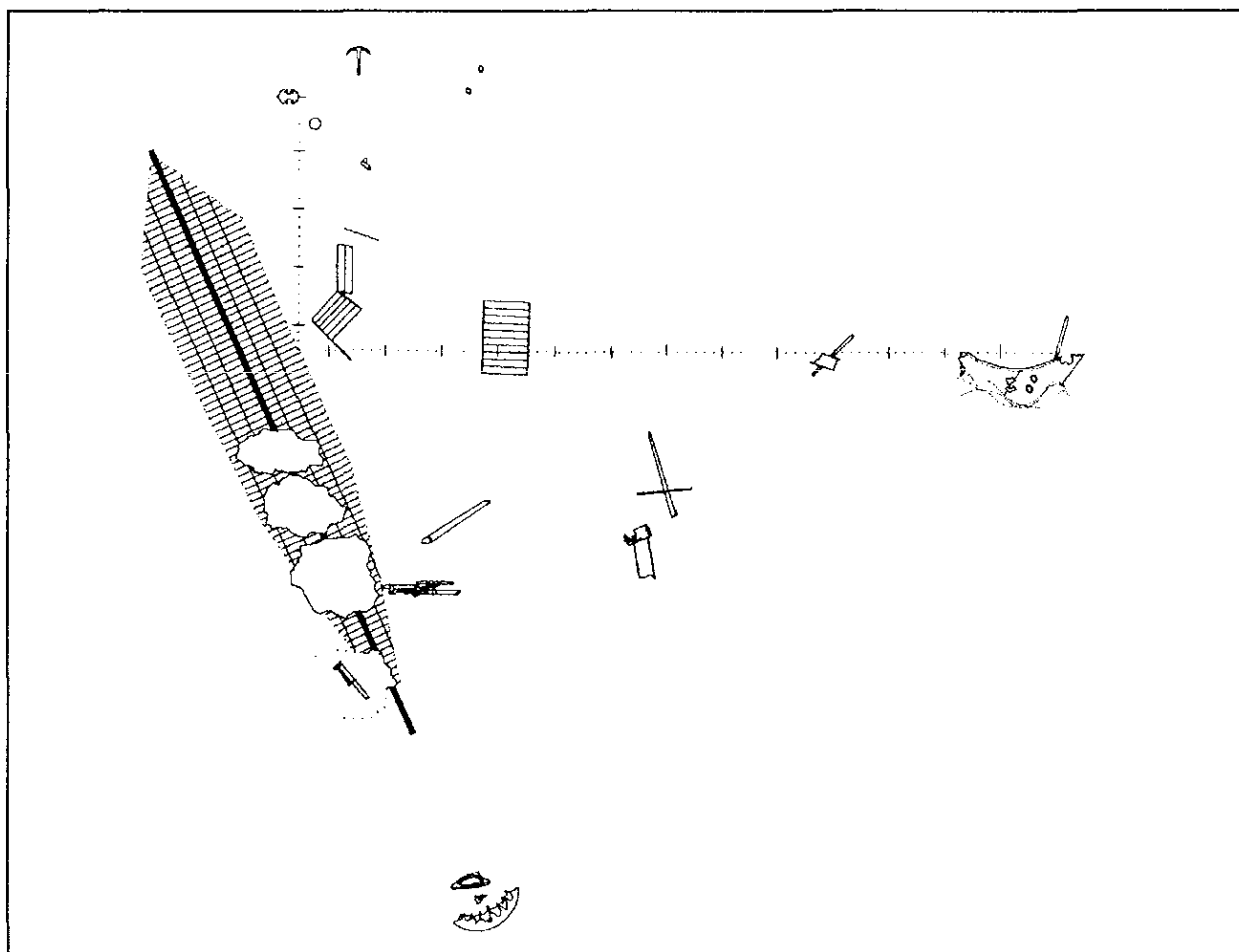


Figure 4.11. An incomplete map of the wreck scatter of the *Aggi*. NPS drawing by Mark Norder.

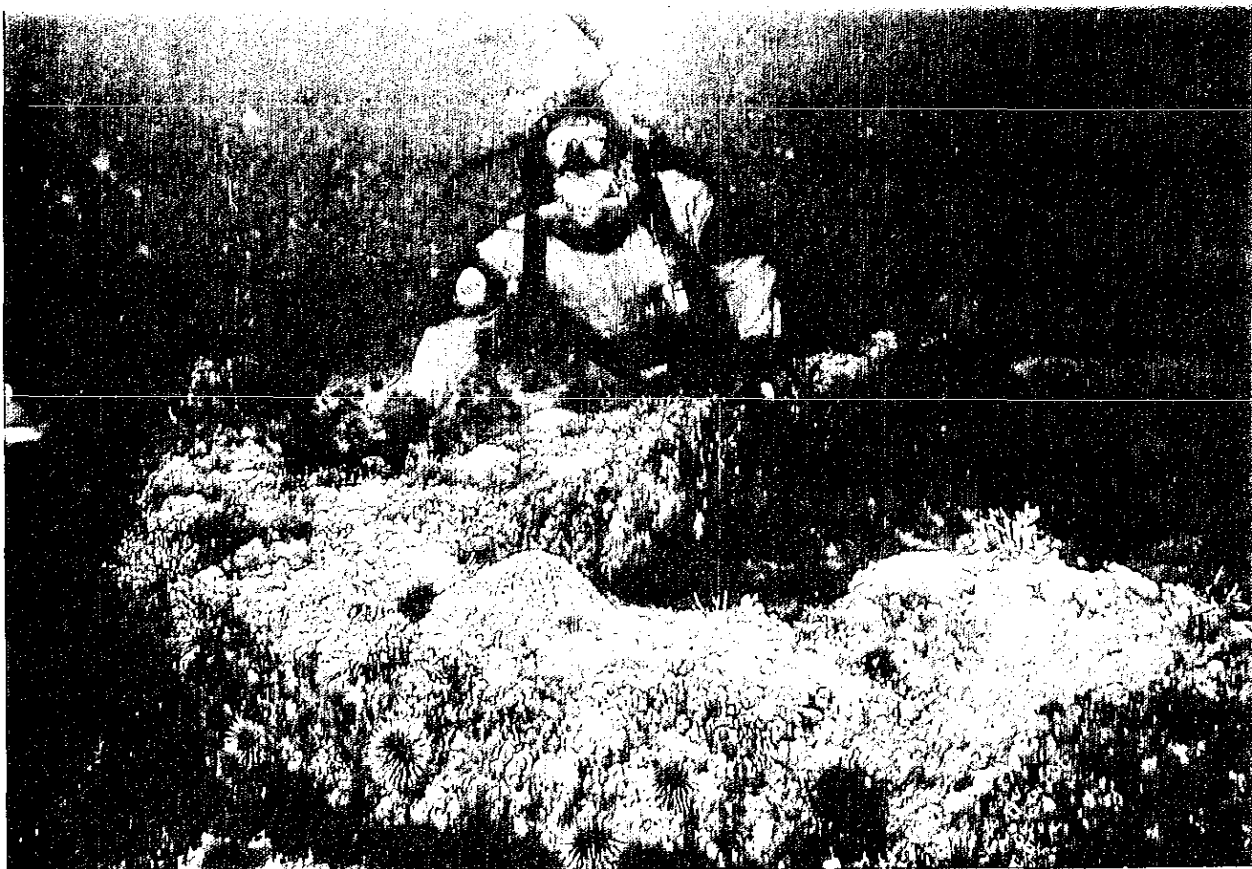


Figure 4.12. *Aggi* anchor. NPS photo by Steve Barksy.

Society in 1967 (SBNP, December 17, 1967), where it remains on display today. There is a notable lack of brass around the wreck, due to the activities of thieves.

Archeological Record

The wreck lies in 20 to 60 feet of water near the shallowest portion of Talcott Shoal. The wreckage of the *Aggi* is more scattered than that of any of the other major wrecks known in the park (Figure 4.11). In 20 feet of water on top of the reef, a massive anchor chain at the bow still connects a windlass, a hawsehole and pipe ripped free of the bow, and a remaining anchor (Figure 4.12). The bow, which once contained this hawse pipe, has been carried off and deposited to the east over 200 feet away in deeper water. The steel

frames visible in the central portion of the wreck are noticeably less massive than those of the *Goldenhorn*.

The main wreck scatter extends into deeper water in a southerly direction. A large piece that is nearly the entire hull bottom, containing the keelson, side keelsons, and deep floors, leads directly to the stern, the deepest portion of the wreck. The extant keelson, one massive I-beam, is more than 200 feet long, and the associated piece of hull bottom is intact out to the turn of the bilges. Mast steps for the mainmast and mizzenmast are 76 feet apart. The foremast step remains unlocated. The keelson has twisted over to the east, or starboard, side uniformly throughout its length. The keelson is flanked by side keelsons 6 feet distant and bilge keelsons a similar interval toward the turn of

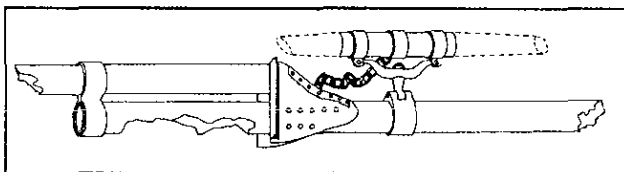


Figure 4.13. Detail of the *Aggi* mast rigging. NPS drawing by Mark Norder.

the bilges. There are intercostal plates beneath the side keelsons. Frames are spaced on 2-foot centers.

Upper wreckage forward of the mainmast has been swept clear of this hull bottom piece and generally deposited in a great jumble to the east. Sternward, the keelson and hull bottom are overlain by pieces of the port side of the hull, down to the mizzenmast step, where about 20 feet of the keelson is again exposed before ending beneath another piece of port hull side.

Separated, and some distance away in 60 feet of water, is the stern, intact from the keel up to the main deck level, tilted over to starboard. Here can be found a well-preserved fantail. The rudder, tiller, and patent steering gear lie nearby.

Mast fragments (Figure 4.13), hull side pieces, and decking lie southeast of these prominent pieces, clearly deposited in this pattern by the prevailing northwesterly swells and current (Figure 4.14). Deck beams are spaced on 4-foot centers. East of the mainmast step and the mizzenmast step lie fragments of the respective masts. Among the fragments of the mainmast is a boiler (Figure 4.15) for a donkey engine. Close by are two capstans (Figure 4.16). No sections of the foremast are evident. Also missing are pieces belonging to any above-deck construction or any sign of the galley or associated brickwork.

A startling example of the force generated by wave action is the presence of the cutwater, the forwardmost piece of the hull, completely separated from the rest of the wreckage and deposited more than 270 feet to the east of the

main hull bottom. Even though the nearest part of Santa Rosa Island is slightly less than a mile away, the beaches along the island east of Talcott Shoal must have received a great deal of material that floated away from the wreck as it broke up.

The present northerly orientation of the wreckage indicates that the seas must have pivoted the wrecked vessel nearly 180 degrees, since it was traveling southeast when struck. As a result, the bow was virtually



Figure 4.14. Mast on the *Aggi* site. NPS photo by Steve Barsky.

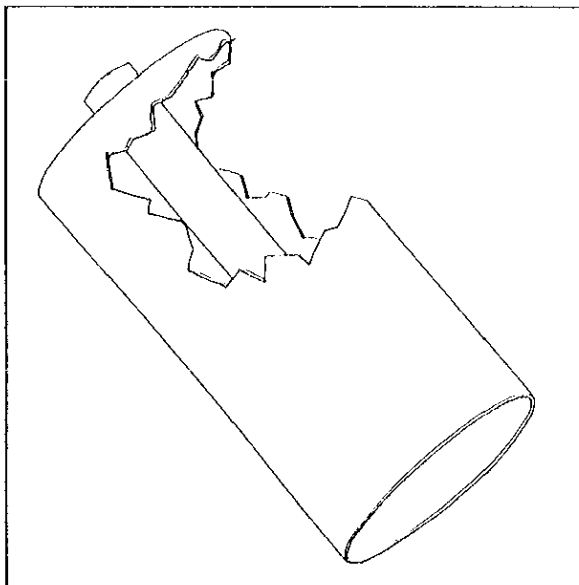


Figure 4.15. Detail of the *Aggi* donkey engine. NPS drawing by Mark Norder.

chewed to bits. The keelson must have laid over as the hull broke up, and the masts, pushed by the prevailing winds, fell to the east. This pivoting motion would have also torn the stern loose.

On a prominent headland near Talcott Shoal, archeological survey crews found a massive hearth filled with ferrous metal scrap, indicating that the fire was fueled with historic period driftwood. Immediately adjacent to this headland is a beach that is very conspicuous from the location of the *Aggi* on Talcott Shoal. This hearth may represent the remains of a large signal fire, perhaps ignited by the crew of the *Aggi* after making the nearest landfall on Santa Rosa Island. This distinctive hearth is unlike any feature noted at Chinese-American abalone camps on the island, the closest of which is only about a mile away on the south side of the island. Archaeomagnetic dating of this hearth might help to determine whether this feature is associated with the wreck of the *Aggi*.



Figure 4.16. Capstan on the *Aggi* site. NPS photo by Steve Barsky.

Liebre
1921-(1921)-1953
Oil Tanker

Gross Tonnage	7,057 tons
Net Tonnage	4,327 tons
Length	435 feet
Beam	56.2 feet
Depth	33.4 feet
Decks	two
Official Number	221073
Construction	steel

Historical Record

The *Liebre* began its career inauspiciously, as the following newspaper article (LAT, March 2, 1921) attests:

BOAT ON ROCKS ON FIRST VOYAGE

Big Oil Tanker Goes into Dry Dock at Harbor for Repairs

Los Angeles Harbor, March 1—The 10,200-ton oil tanker *Liebre*, which went on the rocks on Anacapa Island in the Santa Barbara group at 11 o'clock last night, will go into dry dock at the plant of the Los Angeles Shipbuilding and Dry Dock Company tomorrow for a survey and repairs. Before going into dry dock, the cargo of 75,000 barrels of oil will be pumped from the vessel at the Standard Oil dock.

The *Liebre*, which was on her maiden voyage from San Pedro to Seattle, ran aground six hours after leaving the local harbor. Capt. Cameron said his vessel grounded in a dense fog. After being held in a perilous position on the rocky shore of the island, the *Liebre* was floated four hours later at high tide. S.O.S. calls for assistance had been sent out, but the vessel pulled off under its own power before other vessels had reached the scene.

Had the vessel gone on the rocks a few hours later, at high tide, it would have been necessary to discharge its entire cargo of oil, valued at several hundred thousand dollars, into the sea in order to lighten the vessel. The vessel raised

itself sufficiently with the incoming tide to free itself, however, when the high water mark was reached at 3 a.m.

Proceeding back to the local harbor under slow speed, the tanker dropped anchor in the outer harbor at 12:50 p.m. It was impossible at that time to determine the extent of damage done, and no survey will be made until the ship is placed in dry dock. The entire six sections of the 12,000-ton dry dock at the shipyard will be used in lifting the giant tanker. Had not the dry dock been completed a few weeks ago, the *Liebre* would have had to proceed to San Francisco for the repairs which will be made here.

The *Liebre* was launched at San Francisco in December, was completed in February and arrived at the harbor on her first trip Sunday morning. She is a sister ship of the tanker *Yorba Linda*, which sailed from here on her maiden voyage to Tampico two weeks ago.

The exact location of this grounding is unknown. The report of casualty filed by the captain of the *Liebre* contradicts the newspaper article in stating: "After vessel stranded, jetson [*sic*] cargo in forward deep tanks and work engines to back off, which was accomplished."

The attitude expressed in this article about dumping oil at sea is a fascinating contrast with present day concerns. The newspaper is contradicted by the wreck report which states that 40 percent, by value of the cargo in the forward tanks, was jettisoned when the vessel grounded on the southeast shore of Anacapa,

very near the unattended navigation acetylene light.

The *Liebre* had a long career, remaining in *Merchant Vessels of the United States* as late as 1952. The vessel was scrapped in November 1953. Original tonnage figures for the vessel were 7,444 tons (gross) and 4,590 tons (net).

Cuba
1897-1923
Cargo-passenger Liner

Gross Tonnage	3,168.8 tons
Net Tonnage	1,862 tons
Length	307.7 feet
Beam	42.2 feet
Depth	24.7 feet
Decks	two
Official Number	215771
Construction	steel

Historical Record

The famed German shipyard of Blohm and Voss, which also built the World War II German battleship, *Bismarck* and the Coast Guard training ship *Eagle*, among others, launched the *Coblentz*, the ship that was to become the *Cuba*, from its Hamburg shipyard in 1897. Of steel web-frame construction, the *Cuba* featured eight watertight bulkheads, water ballast tanks, and a double bottom. Three single-end Scotch boilers provided steam. The twin triple-expansion engines drove twin propellers with cast-iron hubs and detachable bronze blades.

The *Cuba* was a well decked ship, with a combined poop and bridge deck 200 feet long and a forecastle deck 47 feet long. Between these two constructions lay the main cargo hold, or well. The amidships bridge deck and steering station were open. Most of the

passenger accommodations lay aft. By the early 1920s, the *Cuba* featured a high technology wireless radio, electric lights, and "certified electrical apparatus" (RAFS 1922) that included auxiliary batteries with some 59 cells (Figure 4.17).

The *Coblentz* was in a Philippine port when the United States entered World War I. The vessel was seized as a war prize and

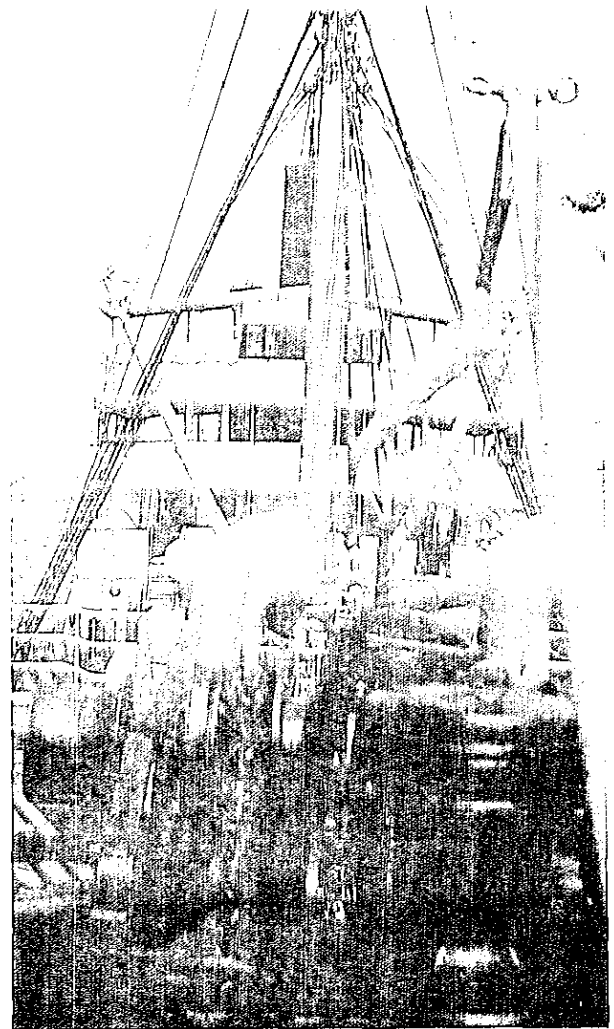


Figure 4.17. View aboard the *Cuba*, looking sternward. The deck machinery in the foreground is prominent in the wreckage today. Photo courtesy of Santa Barbara Museum of Natural History.

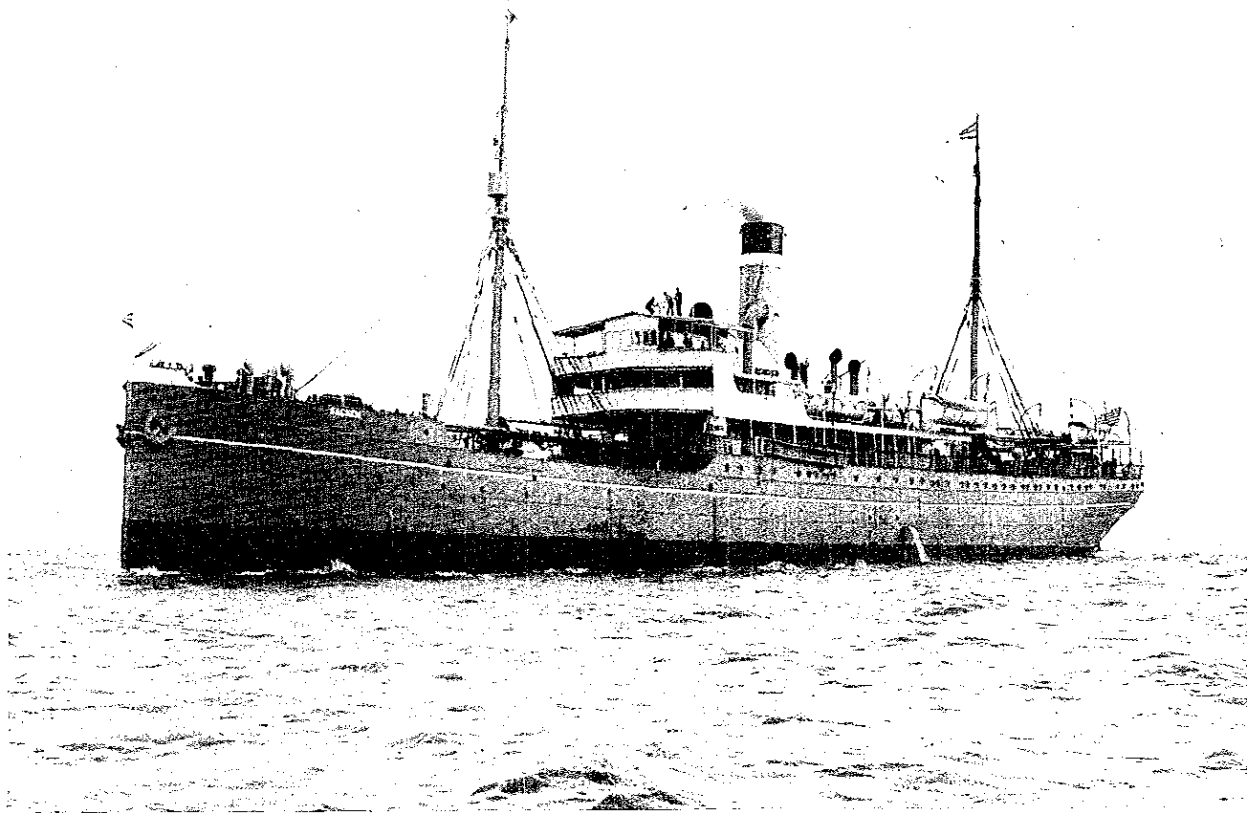


Figure 4.18. *Cuba* as *Sackem*. Photo courtesy of Mike McGarvey.

admitted to American registry under a joint resolution of Congress on May 12, 1917, and was renamed the *Sackem* (Figure 4.18). After being purchased by the Pacific Mail Steamship Company from the United States Shipping Board, the *Sackem* was rechristened the *Cuba* on May 11, 1920. Little is known about the vessel's earlier career under German registry. The following cryptic entries suggest a well-maintained vessel (RAFS 1922). The subject of a special survey in March 1918, the *Cuba*'s shafts were drawn in February 1921 and its machinery was surveyed in August 1922. In 1922, the *Cuba* carried an "A1" rating, the second highest possible.

First placed in service between San Francisco and Havana, the *Cuba* later voyaged between various South American and Mexican ports and San Francisco (Shaw 1985:114-115). On August 17, 1923, the *Cuba* left the Panama Canal Zone, stopping briefly at Mazatlan on September 3. By the early morning hours of September 8, the *Cuba* approached the waters of the Santa Barbara Channel. The crew had navigated solely on dead reckoning for the past three days because of persistent fog. A lack of spare parts had left the ship's radio unrepaired. Captain J. C. Holland retired for the night, leaving orders for him to be roused if visibility became less

than 5 or 6 miles, and in no case later than 3:00 A.M. in order to take soundings.

Second Officer John Rochau did not call the captain, even though he estimated visibility at 4 miles while on watch. When First Officer Wise arrived to take the watch at 4:00 A.M., he immediately awakened the captain. In the words of the radio operator, "the captain was already on the bridge, his shoes merely slipped on, with his suspenders hanging over his hips, and was taking charge of the vessel" (LAT, September 10, 1923). Holland directed an immediate turn to port (west), and at that time the vessel struck rocks about one-quarter mile off Point Bennett, San Miguel Island.

Holland ordered reverse engines and the *Cuba* briefly refloated, but was swung around by the seas and ran onto the rocks stern first, demolishing the propellers. In rough seas, the vessel listed to port, causing complications in launching the starboard lifeboats, which had to be dragged across the vessel to the port davits.

Captain Holland, the purser, the steward, and eight crew remained aboard to guard the cargo, an important part of which was silver bullion, while the rest of the crew and passengers took to the lifeboats. Consternation and near panic among the second-class passengers on the lower deck was handled capably by Stewardess Lottie Brown. While most of the lifeboats reached the beach at Point Bennett, the lifeboat of First Officer Wise voyaged east along the south side of San Miguel Island and entered the Santa Barbara Channel through the San Miguel passage. After a brief encounter with some troublesome whales, Wise and his crewmen hailed the Standard Oil tanker *W F Miller*, which transported them to San Francisco. Those who had arrived on the beach gave out stories of vessel wreckage and human remains that littered the area. Three lumber schooners known to have wrecked in the immediate

vicinity certainly contributed to the wreckage, while the abundant archeological sites at Point Bennett provided the human skeletons.

Two other lifeboats, one commanded by the luckless Second Officer Rochau, traveled due west, owing to a compass reversal, and by great good fortune encountered the navy destroyer *USS Reno* in thick fog. This vessel turned to Point Bennett and removed the people from the beach, returning them to San Pedro. The *Reno* also sent the first radio messages concerning the disaster to the outside world. On September 9, or a few days later, the *USS Selfridge* reached the wreck and removed the silver bullion, as well as most of the crew that had remained behind. Passengers and bullion eventually reached San Francisco aboard the steamer *Venezuela*. A court of inquiry later fixed the blame on Second Officer Rochau, whose license was suspended for 90 days (SBMP, September 29, 1923).

The wireless traffic resulting from the notification of authorities about the *Cuba's* fate has been suggested as a contributing factor to one of the worst peacetime disasters ever suffered by the U.S. Navy, the wrecking of a flotilla of destroyers near Point Arguello about five hours later. The naval board of inquiry that investigated this mass wrecking apparently considered the possibility but rejected it.

Captain Holland and six crew members remained with the *Cuba* until September 14, staying in the fisherman's hut at Point Bennett and removing "money, bullion, passengers' baggage and other valuables" from the stricken ship. Two watchmen were left behind (SBMP, September 15, 1923), but they were evidently not effective, being mentioned later only for selling some deck chairs for \$75. Frenzied salvage of borderline legality

promptly ensued, keeping the *Cuba* in the newspapers for several more weeks. Undoubtedly, more salvage occurred than has been recorded; the *Cuba* rests in an isolated spot, open to every passing ship.

Captain Ira Eaton visited the *Cuba* first, searching primarily for bootleg liquor but finding only much cheaper marijuana, which was thrown overboard in disgust. Eaton did find more than 500 letters that he turned over to postal authorities (SBMP, September 26, 1923). The next day a band of 16 armed men (apparently Eaton and his crew) had taken over the *Cuba*, removing "blocks, radio sets and aerials, nautical instruments, mahogany doors and panels, glassware, galley-gear, linen, and parts of the cargo to the value of more than \$400,000" (SBMP, September 27, 1923). Eaton is reported in the same article to have recovered "a piano, bedding, carpets, furniture, mail, electric fans, galley equipment, and coal." Lloyd's of London was asking for bids on the *Cuba* at this time, even as other salvagers were heading for the wreck. One group, led by Marcella Dillon, was "repulsed by Captain Eaton and a dozen of his crew, who drove them away with guns, threatening to shoot anyone who attempts to come aboard" (SBMP, September 28, 1923). At this point, Lloyd's asked the Los Angeles district attorney to take action against the salvagers.

The revenue cutter *Vaughn* steamed to the wreck with orders to capture all trespassers and seize salvaged items, as Eaton and Lloyd's representatives debated the legal status of the *Cuba* and its goods. They eventually struck a deal whereby Eaton was to receive 40 percent of the value of the goods he had removed for his efforts. At the same time, Marcella Dillon was reported to have stripped and sold fittings and goods from the vessel in another unauthorized salvage operation

(SBMP, September 30, 1923). Dillon did apparently salvage and sell some material at the dock in Santa Barbara, including "blankets, coats, carpets, rope, electric switches and motors, drug stores, and commissary stores" (LAT, September 19, 1923).

As the dispute was negotiated, "a company of Motion Picture actors [used] the wreck for the past two days for shipwreck pictures" (SBMP, October 2, 1923). The company was from the Thomas Ince Studios of Hollywood (SBMP, September 30, 1923). The result of this filming, or the whereabouts of any resulting footage, is unknown.

Finally, as the vessel listed "40 degrees to port" and began breaking up, Eaton and Lloyd's struck a deal for the hulk, paying an undisclosed price (SBMP, October 7, 1923). Although Eaton planned to strip machinery from the vessel with divers, no additional salvage occurred, as oil from the wreck hindered operations. Eaton apparently paid \$700 for the wreck.

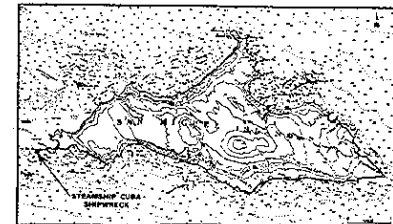
In addition to the salvage related above, the *Cuba*'s safe and some corner-mount sinks reached the ranch on San Miguel Island. The preceding accounts suggest that as salvage commenced, the most valuable and portable items were taken first—understandable behavior in view of the precarious nature of the wreck and its steady disintegration. Much of interest remains on the wreck today.

Archeological Record

The wreckage of the *Cuba* is the most compact and organized of all of the major wrecks in the park (Figure 4.19). Despite the violent nature of the waters around Point Bennett, the material has remained in place. An impression gained from repeated dives on the wreck is that the *Cuba* is actually sheltered from heavy seas by a series of shallow

PT. BENNETT, SAN MIGUEL ISLAND
CHANNEL ISLANDS NATIONAL PARK
SHIPWRECK SURVEYED ON OCTOBER 17-19, 1989

TWIN SCREW STEAMER
BUILT BY: *Blohm & Voss 1897*
Hamburg, Germany
WRECKED: *September 8, 1923*
LENGTH: *307.7 Feet*
WIDTH: *42.2 Feet*
DEPTH: *24.7 Feet*
GROSS TONS: *3168*
NET TONS: *1962*



57

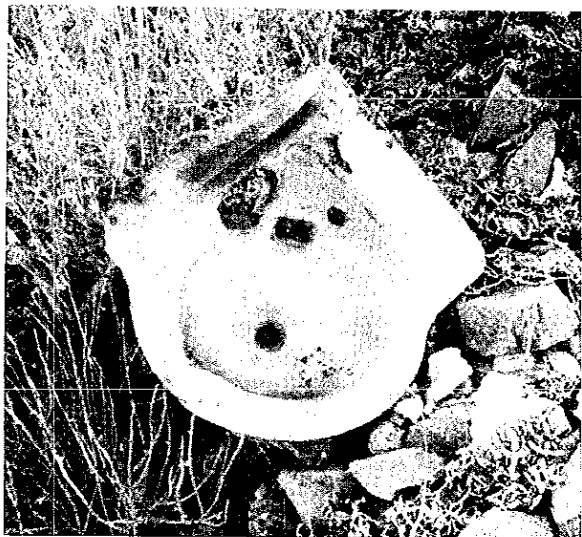


Figure 4.20. One of the three corner sinks present today at the Lester Ranch ruins, San Miguel Island. At least one identical sink is present within the *Cuba* wreck scatter. NPS photo by Don Morris.

reefs that flank it on the north, west, and south, and by Point Bennett on the east and southeast. The immediate vicinity of the wreck is calmer than the surrounding area, although the wreck is usually not approachable. A southern swell, particularly common during summer months, presents a discouraging picture to prospective divers.

The vessel's cutwater is tilted back at roughly a 45-degree angle, pointing south. Right in front of the bow lies an anchor with attached anchor chain. Two other anchors, one still within a hawse pipe, can be found in wreckage on the starboard side of the bow. The main deck near the bow has fallen straight down, retaining an anchor winch and related gear. This area of the wreckage can be compared with a photograph of this portion of the stranded *Cuba*.

Proceeding aft, two more large winches can be found amidships in an area near the cargo mast and the main hatch. A fragment of 4-inch ceramic-tiled surface is located here,

near fragments of bulkhead or decking, all of which suggest relatively finished construction that might be associated with the bridge. Also, here is a metal corner wash basin (Figure 4.20) identical to three found at the Lester ranch house on San Miguel Island, perhaps from the forecabin. Inner aspects of both port and starboard hull side are visible beneath extensive sections of the main deck. Several bitts and empty portholes occur here.

Swimming north, or aft, a diver sees prominent sections of the floors lying beneath two conspicuous single-end Scotch boilers. Immediately aft are the massive twin triple-expansion steam engines (Figures 4.21, 4.22 and 4.23), standing upright and reaching

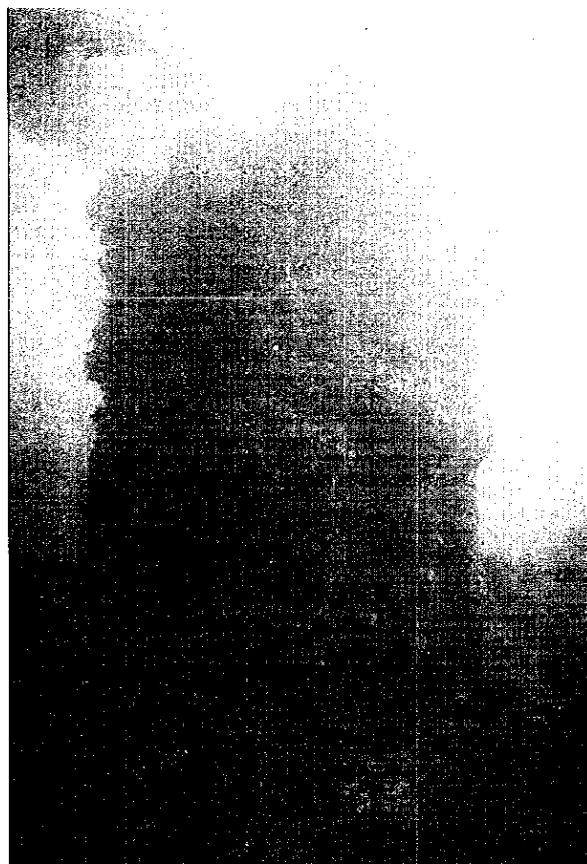


Figure 4.21. The *Cuba*'s triple expansion engines reach to within ten feet of the surface. NPS photo by Mark Norder.

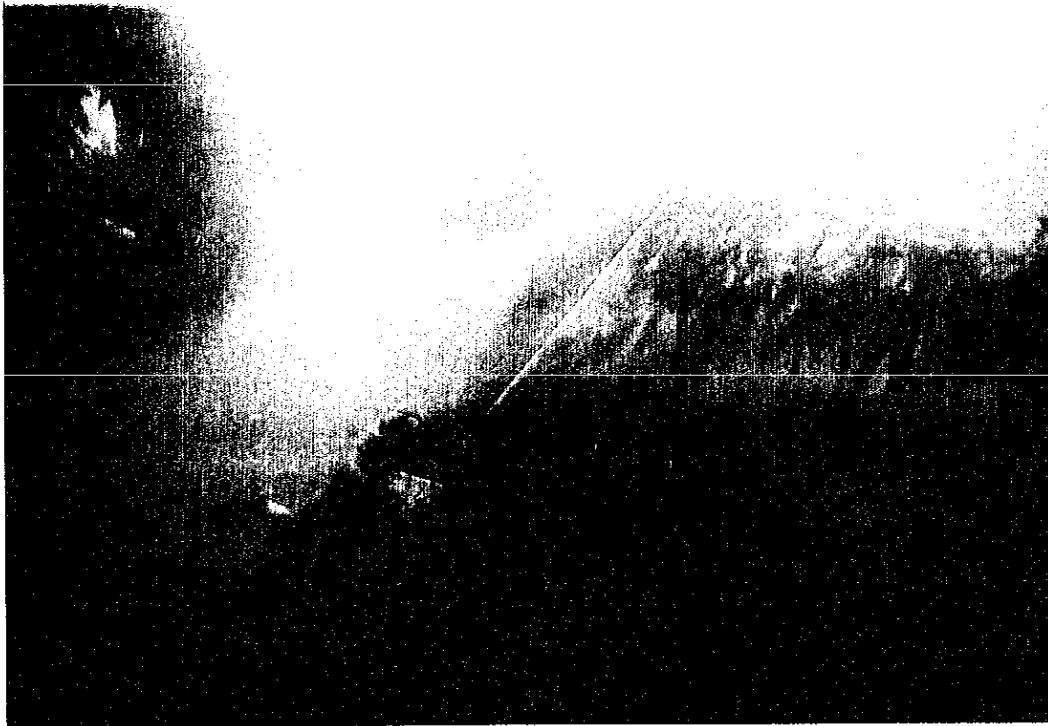


Figure 4.22. Documenting the *Cuba*, San Miguel Island. NPS photo by Mark Norder.



Figure 4.23. Another view of the *Cuba*'s engines. A diver can easily swim through the openings below the expansion chambers. NPS photo by Mark Norder.



Figure 4.24. One of the *Cuba*'s detachable propeller blades is visible at the left of the photo. NPS photo by Mark Norder.

within less than 10 feet of the surface at low tide. Nearby are fragments of copper wire and paired pump assemblies. Twin propeller shafts (Figure 4.24), still on bearings, flank the condenser and lead aft to the stern area. There, sections of surfaces tiled in a distinctive, octagonal, two-color ceramic tile, as well as individual tiles, suggest the furnishings of the passenger accommodations. On the starboard side near a piece of hull side, are a smaller single-ended Scotch boiler, two separate bronze propeller blades, rudder fragments, and sections of the steering gear.

Throughout the wreckage, bare circular holes in hull side fragments proclaim the former locations of portholes. Despite obvious pillage by brass thieves, much material remains on this turn-of-the-century steamer. Its wild and remote setting in the breakers at Point Bennett, the proliferation of pinnipeds around the wreck, and the beautiful kelp canopy make the *Cuba* a tremendously impressive dive. Its historical and archeological potential is far greater than the brass artifacts that have lured vandals here in the past.

Beulah
1923-(1933)-1948
Copra Freighter

Gross Tonnage	1,389 tons
Net Tonnage	1,042 tons
Length	232 feet, 6 inches
Beam	37 feet, 7 inches
Depth	20 feet, 4 inches
Decks	one
Official Number	15639
Construction	steel

Historical Record

The *Beulah* is frequently mentioned as an Anacapa Island wreck. The following newspaper account indicates only a brief grounding for this vessel. Little more is known of its history.

Flood Brothers' little Panamanian motor ship *Beulah* yesterday at daylight worked herself free from the reefs off the east end of Anacapa Island, on which she had grounded in fog three hours previous, and proceeded to San Francisco apparently little damaged.

The *Beulah*, operating in copra trade among the Tonga and Fiji archipelagos, sailed for San Francisco from this port Thursday after discharging resin cargo from Manzanillo. Of 1045 net tons, she was originally built as a bark at Grimsted, Norway, in 192 [?], then being named *Heiren*. Two Bolindor diesels were installed when her spars and yards were removed [LAT, September 23, 1933, Shipping News].

Although the ship remained in Norwegian registry, by 1926 it was powered by twin diesel engines. The *Beulah* attained Panamanian registry by 1929 (*Lloyd's Registry*, 1929-30). The vessel was last known as *Tai Woo* in the 1947-48 Lloyd's Registry.

Aristocratis
1943-(1949)-1968
Freighter (Liberty Ship)

Gross Tonnage	7,191 tons
Net Tonnage	4,309 tons
Length	441.5 feet
Beam	57 feet
Depth	37.3 feet
Decks	two
Official Number	MCE 1006
Construction	steel

Historical Record

The *Aristocratis*, the former Liberty ship *William H Jackson*, grounded in "soupy fog" near Johnson's Lee on Santa Rosa Island on December 1, 1949, while en route to "Keelung, Formosa," (Taiwan) with a cargo of coal. Another newspaper article describes the cargo as "ammonium sulphate in holds, tanks on deck." Immediate radio messages from the vessel indicated no danger to the crew of 30 "if the weather held." Three Coast Guard cutters, the *Perseus*, the *Diligence*, and the 83-366, came to the grounded vessel in fog heavy enough to impede even these radar-equipped vessels. The Red Stack tug *Relief* arrived on the scene and pulled the *Aristocratis* free the following day on a high tide (SBNP, December 2, 1949).

The *William H Jackson* was hull number 2156 when built in the Bethlehem-Fairfield

Shipyard, Baltimore, from which it was launched in July 1943, equipped with triple-expansion engines from General Machinery Corporation. The vessel was known as the *Aristocratis* until 1951, when it became the *San Roque*. Later registered as the *Aghios Spyridon* and the *San Spyridon*, the vessel was scrapped in Shanghai in December 1968 (Sawyer and Mitchell 1985:46).

Archeological survey might reveal coal from this vessel along the coast near Johnson's Lee, although there is no specific mention of any cargo dumping during the rescue of the *Aristocratis*.

Patria
1944-(1954)-1964?
Freighter

Gross Tonnage	7,217 tons
Net Tonnage	5,063 tons
Length	424 feet, 6 inches
Beam	57 feet, 2 inches
Depth	34 feet, 9 inches
Decks	two
Official Number	73062
Construction	steel

Historical Record

The *Patria* was alleged to have been a Liberty ship (Barksdale 1989), but no such vessel name appears in Sawyer and Mitchell (1985), either as an original construction name or as a later renaming. The *Patria* is doubtless confused with the *Aristocratis*, which was a Liberty ship. The *Patria*, actually a Canadian vessel, was launched in 1944 in Vancouver, British Columbia, and was originally named *Moose Mountain Park*. The vessel had also been known as *Benoil* and *Conqueror* in a relatively short career (RAFS 1954). This source reports that the vessel

carried a direction finder and a Fathometer. A triple-expansion engine powered the vessel. *Lloyd's Registry*, 1963-1964 edition, gives later names for this vessel of *Running Eagle* and *Patapsco River*, the latter apparently *Patria*'s final designation.

Barksdale (1989) reports that the *Patria* ran aground near Skunk Point, Santa Rosa Island, on June 21, 1954, while steaming in dense fog. It was carrying 10,000 tons of coal from Norfolk, Virginia, to Yokohama, Japan. At this time, Lloyd's had recently assigned the vessel a "100A1" rating (RAFS 1954). The *Patria* was eventually freed from the shoal. People from the ranch on the island found coal washed up on the beaches south of Skunk Point in subsequent years (Lulis Cuevas, personal communication, 1992). NPS divers recovered two small fragments of coal from this area in 1995.

Chickasaw
1942-1962
Freighter

Gross Tonnage	6,131 tons
Net Tonnage	3,567 tons
Length	439 feet
Beam	63.1 feet
Depth	27.5 feet
Decks	---
Official Number	241993
Construction	steel (welded)

Historical Record

The vessel that was to become the *Chickasaw* saw long military service. Laid down two days after Pearl Harbor, the *Thurston* (AP-77) was commissioned on September 19, 1942. Fitted as an auxiliary transport, the vessel participated in the invasion of North Africa, the invasion of

Sicily, and convoy duties in the Atlantic theater. In 1944, the *Thurston* landed troops at Omaha Beach in the invasion of Normandy and later in the invasion of southern France.

Near the end of 1944, the *Thurston* returned to New York for an overhaul, then departed just before Christmas for the Pacific. In early 1945, the *Thurston* joined in the attacks on Iwo Jima and Okinawa before returning to San Francisco. After more transport duties, the vessel was again in San Francisco when the war concluded. The *Thurston* ended its military service by returning servicemen stateside until June 1946. During this period, the vessel survived an ambush by grenade-carrying Japanese soldiers hidden in a drifting dory. The *Thurston's* military service earned the vessel seven battle stars.

The *Thurston* was decommissioned in August 1946, being renamed *Del Santos*, a name briefly held earlier when the vessel was under construction. In 1948, Waterman Steamship Company bought the vessel, which had been struck from the navy's list in late August 1946. In 1949, Waterman renamed the vessel *Chickasaw* and placed the ship in service (*Dictionary of American Naval Fighting Ships* 1981 7:179-180).

The *Chickasaw* began its last voyage from Japan bound for San Pedro with a cargo of general merchandise that included plywood, shoes, toys, dishes, and at least one 1950s vintage Buick (Peter Howorth, personal communication). With visibility reduced by a tremendous southeaster that had hammered southern California for several days, the *Chickasaw* went hard aground just west of

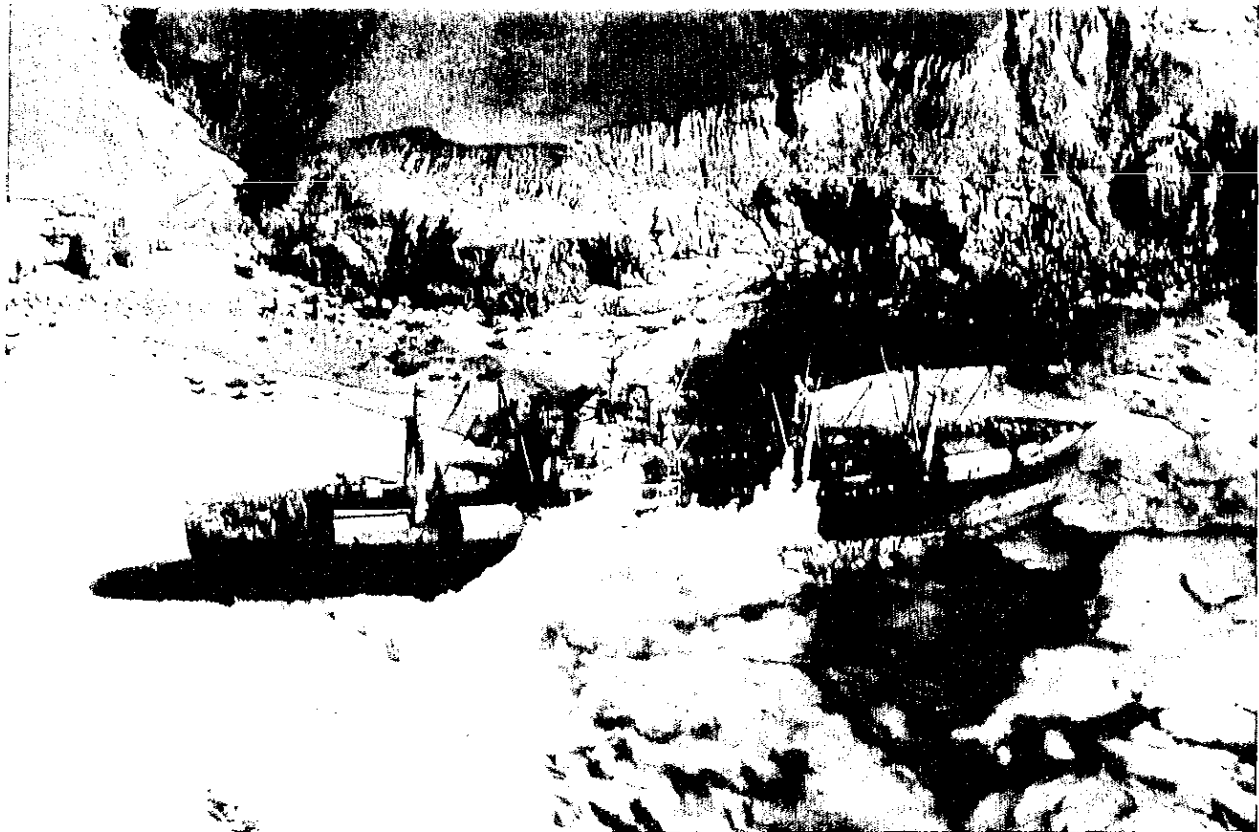


Figure 4.25. *Chickasaw* aground just west of South Point on Santa Rosa Island, February 7, 1962. Photo courtesy of the Schwemmer Collection.

South Point on Santa Rosa Island on February 7, 1962 (Figure 4.25).

The grounding of the *Chickasaw* was at first overshadowed by an impending marine disaster of far greater proportions for southern California readers—for a brief period actress Jayne Mansfield was reported lost at sea during a Bahamas vacation. But by February 9, the *Los Angeles Times* reported the grounding and stated that the vessel was in "no immediate danger" while vessels standing by awaited better weather before trying to free the *Chickasaw*.

Better weather conditions never occurred; mud slides and floods in southern California became national news items. Three days later, newspapers reported the transfer of 32 crewmen and four passengers via a breeches buoy over 8-foot swells to Santa Rosa Island. From this small beach, all but four crewmen climbed up the steep slopes and walked to

Johnson's Lee, assisted by personnel of the 669th Air Control and Warning Squadron. From there, all transferred to a Coast Guard cutter and traveled to Santa Barbara. The four nontrekking crewmen sheltered in a small building nearby (perhaps the South Point Light) and left via helicopter the next day.

On that day, February 13, swells described as shooting as high as the bridge pummeled the ship parallel to the shore and shoved it further onto the rocks. On the following day, February 14, the *Los Angeles Times* published a photograph captioned "Hopelessly Aground," showing the vessel in essentially its present location.

Subsequent photographs of the *Chickasaw* over the years pay tribute to its sturdy welded construction. The ship has disintegrated far more slowly than any other vessel wrecked in the park, even though the area on which the vessel became stranded is not well sheltered.



Figure 4.26. *Chickasaw* in December 1982. By the end of the winter, the stack on the amidships section of the wreck would be deposited on shore, where it remains today. NPS photo by Don Morris.

By 1995, most of the wreckage had submerged.

Diving on the vessel is extraordinarily unsafe because the wreckage, still partially intact, presents a tangle of rusting, eroded steel plates and beams. Many of these have eroded to very sharp points and edges that resemble giant razor blades. Archeological

survey in the immediate onshore area has located a cable anchor that may have secured the shoreward end of the breeches buoy used to remove the crew. The smokestack, which broke off the amidships portion of the wreckage during the winter storms of 1983, now lies inland in a small drainage known as Chickasaw Canyon (Figures 4.26, 4.27 and 4.28).

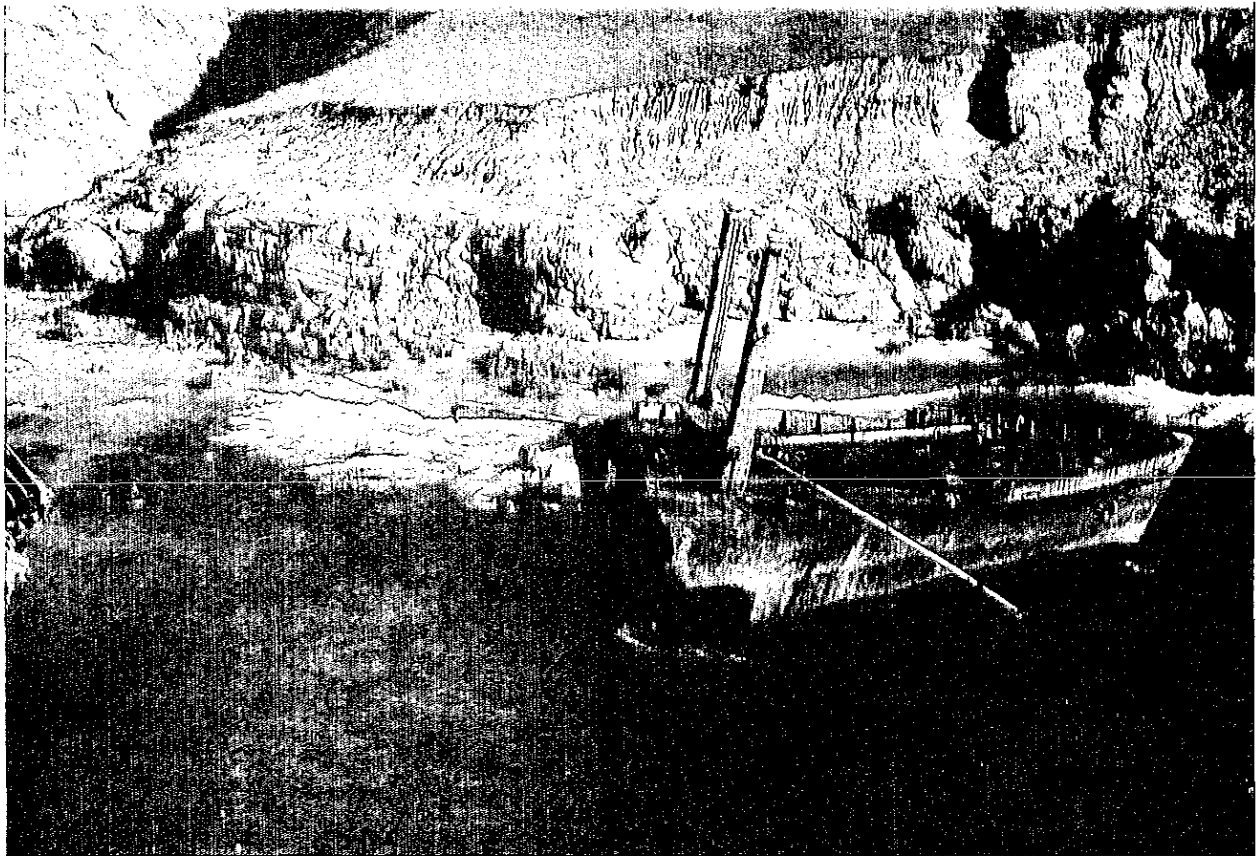


Figure 4.27. Amidships island and stern of the *Chickasaw* have moved to the left, or northwesterly, from their original locations. NPS photo by Don Morris.

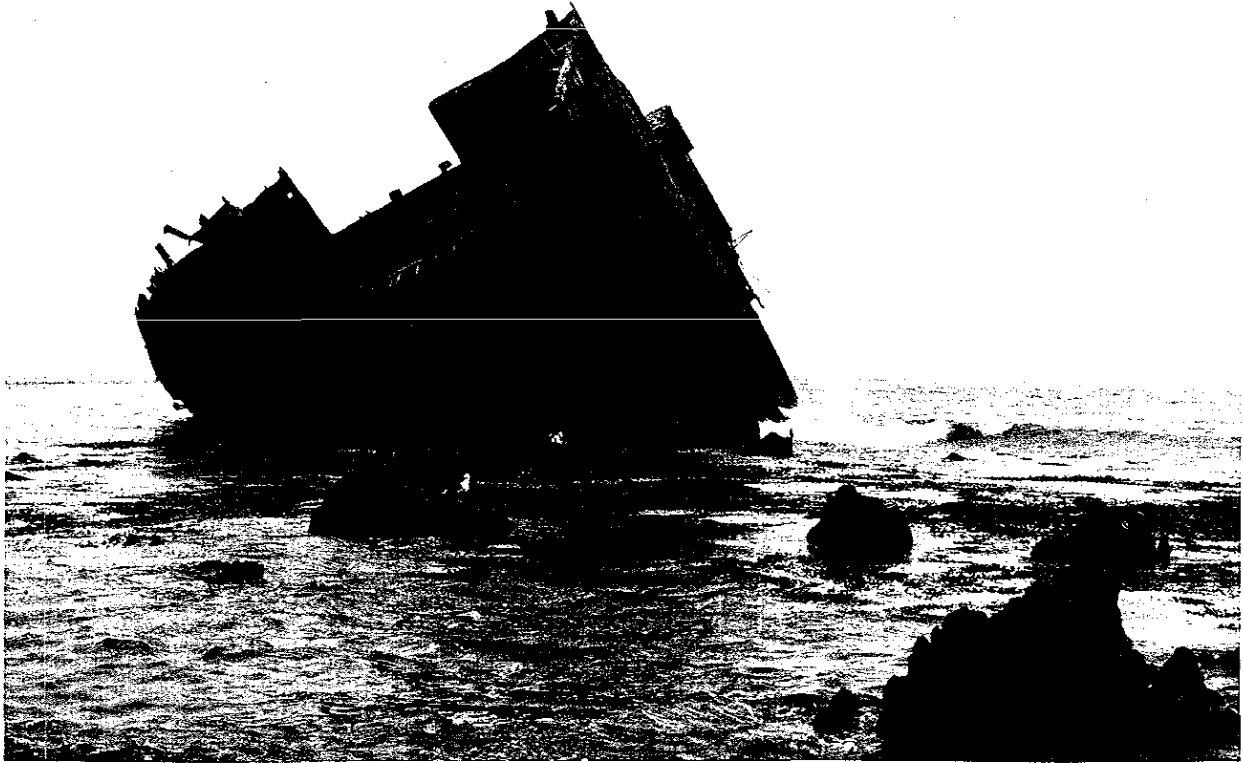


Figure 4.28. By 1992, only the amidships portion of the *Chickasaw* remains above sea level. This section broke up in 1995. NPS photo by Marc Linder.

CHAPTER V

Vessels of the Lumber Trade

The development of the California coastal lumber trade is important to understanding the shipwrecks of Channel Islands National Park. The growing population of southern California during the nineteenth century required additional housing and other facilities, boosting the demand for lumber. This demand increased sharply as railroads reached the Los Angeles area in the late 1870s. The lumber trade increased steadily from 1880 onward. During the 1880s, Los Angeles grew from 15,000 to 50,000 inhabitants, generating a demand for construction material (Queenan 1983:27). Railroad construction alone required significant cargoes, while the expansion of the railroads itself expanded the market for lumber products.

The best source for lumber was the forests of northern California and the Pacific Northwest. These vast forests also provided the raw material for the vessels that would carry sawn boards and other forest products to market. As a contemporary author saw it:

These firs . . . have become celebrated throughout the world for their magnificent proportions, and the size and strength of the spars and lumber

they supply. They frequently furnish sticks 100 to 150 feet long, 18x18, and even 24 inches square, without a particle of sap, without a rent or check, perfectly sound, straight and free from knots. Planks of this timber 60 and 90 feet long, and of any required width and thickness, are readily obtainable, thus avoiding the necessity for more than one-third as many butts or scarphs in a ship's sides, decks, or fore and aft timbers, as are required in Eastern or European built vessels [Hopkins 1874:21].

The lumber trade developed in schooners, typically three-masted vessels, whose builders made the holds as open as possible to accommodate the lumber cargo and provided the necessary strength by building unusually stout keelsons and fastening unusually thick ceiling (interior) planking. The schooners carried more lumber on deck than within their holds. This practice improved the cargo as salt spray hardened the wood.

By the turn of the century, power vessels, the so-called "steam schooners," were beginning to supplant the sail schooners.

None of these later ships wrecked in the park. Through time, in both sail and steam, there has been a trend toward employing larger ships.

Railroad construction provided an expanding market for lumber products in the regions east of Los Angeles and San Diego. An example is Fort Bowie, a cavalry post in far southeastern Arizona that utilized timber construction for nearly all buildings after the arrival of the Southern Pacific Railroad in 1881. Heliographs, used to communicate during the Geronimo campaigns, were mounted on large, clear redwood posts that still survived on strategic mountain summits at the time Fort Bowie National Historical Site was established in 1967. These posts had undoubtedly started their journey to the high Arizona deserts on board a lumber schooner bound for Los Angeles. The coal that ran the trains was itself brought from abroad in vessels like the *Goldenhorn*.

Lumber was the first important trade in the Los Angeles ports. By 1912, Los Angeles led the world in volume of lumber imports (Queenan 1983:200). Over the last 50 years, lumber has not retained its early overwhelming dominance as the Los Angeles economy has grown and diversified, but it has continued to be an important import. The early ascendancy of this trade is mirrored in the lumber schooners that came to grief in the Channel Islands.

In this chapter, we present accounts of the lumber schooners that wrecked within Channel Islands National Park, proceeding from the earliest to the latest, by date of wreck. In accord with the development of the trade, this arrangement also follows a rough order from the smallest to the largest of the vessels.

G W Prescott

1874-1879

Two-masted Coastal Lumber Schooner

Gross Tonnage	112.97 tons
Net Tonnage	not applicable
Length	91.5 feet
Beam	27.2 feet
Depth	7.3 feet
Deck	one
Official Number	85329
Construction	wood

Historical Record

Thomas J. Peterson built the *G W Prescott* at Little River, California, in 1874 for a group of owners among whom James Hanson of San Francisco was the half owner and master. The following delightful account of the ship's launching is recorded:

The new schooner, *G W Prescott*, was successfully launched on Wednesday evening at 7 P.M. A large concourse of visitors was present. She is owned by the Little River Mill Company, and Capt. Hanson. Mr. G. W. Prescott is the agent of the Little River Company. After the launch, a social dance was given at Corrigan Hall, where a few pleasant hours were enjoyed by all who participated. Another new schooner has been successfully launched into the still waters of Little River Bay by Capt. Thos. Peterson the builder [*Mendocino West Coast Star*, June 12, 1874, quoted in Haller 1986].

By 1878 Hanson had sold half his interest to the *Prescott's* then current master, William Fox.

Carrying a cargo of railroad ties destined for San Pedro, the *G W Prescott* stranded on the west end of San Miguel Island on August 15, 1879, at 2:00 A.M. The precise location is not known. The *G W Prescott* is the earliest and smallest lumber schooner to have wrecked in the Point Bennett area. The cargo is appropriate; this was a time when the Southern Pacific Railroad was actively building toward Los Angeles and San Pedro.

J M Colman

1888-1905

Three-masted Coastal Lumber Schooner

Gross Tonnage	463 tons
Net Tonnage	389 tons
Length	157 feet
Beam	37.1 feet
Depth	11.3 feet
Decks	one
Official Number	76717
Construction	wood

Historical Record

Henry K. Hall built the *J M Colman* in Port Blakely, Washington, shortly after finishing the *Comet*. J. J. McKinnon was the principal, original owner. Until 1897, Preston & McKinnon, Inc., was the principal owner and, together with other individual owners, engaged in the coastal lumber trade. Thereafter, the *J M Colman* was the property of Puget Sound Commercial Company, Inc., along with variety of individual owners, one of whom remained J. J. McKinnon. In the *J M Colman's* certificate of registry, dated September 26, 1899, one "James M. Colman of Seattle" appears as a "4/16" owner. In

June 1901, Pacific Shipping Company became the sole owner of the vessel (Figure 5.1).

The *J M Colman's* measurements remained unchanged throughout its life. Haller (1986) points out that the vessel was one of the largest terns, or three-masted schooners, built, being only 13 gross tons smaller than the largest such vessel, the *W F Jewett*. Among net tonnage deductions were 8.04 for "donkey engine and boiler." A photograph showing the stern settles the question of the proper spelling of the last name, which is also spelled this way consistently on official documents (Figure 5.2). Most newspaper accounts spell the name as "Coleman." A partial list of the *J M Colman's* voyages shows steady traffic between various northwestern ports and San Pedro, with occasional stops in San Francisco.

En route from Everett, Washington, to San Pedro, the *J M Colman* went ashore "on the southwest point of San Miguel Island" (Point Bennett) on September 4, 1905. Haller (1986) relates details of the wreck, which involved 36 hours of dead reckoning in dense fog before stranding. "After striking, the *Coleman* [sic] ground and pounded her way over the first reef, sinking down into deeper water between where she first struck and another reef, further inshore" (LAT). If we assume normal conditions at Point Bennett, this description indicates that the vessel struck on the northwesterly side of Point Bennett, where the surf would energetically shove the vessel farther toward the shore. Lines of east-west trending reefs, which are extensions of the tilted sedimentary sandstone formations seen on the island, proliferate off this shore of the island.

Captain Charles Peterson and five of the crew remained on the island while the other five, led by First Mate Frank Patterson, rowed toward Santa Barbara. The steamer *Mandalay*

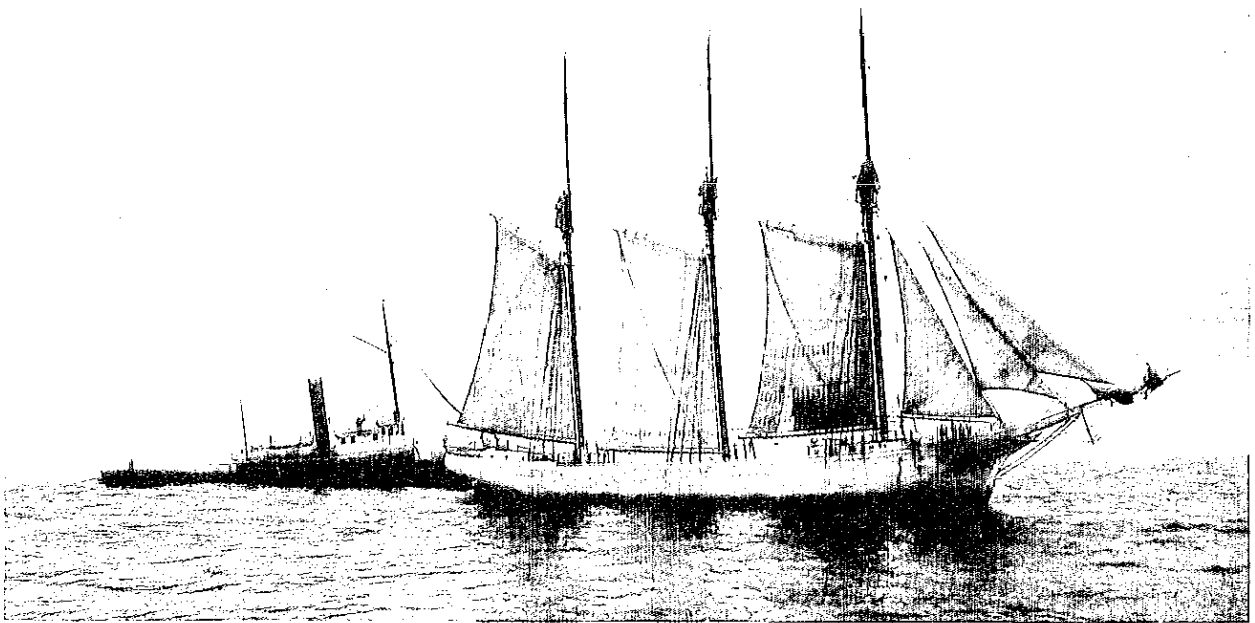


Figure 5.1. *J M Colman* about 1900-1905. Photo taken off Cape Flattery or in the Straits of Juan de Puca. Photo by Hiram Hudson Morrison, courtesy of San Francisco Maritime NHP.

met them during their voyage and took them to San Pedro (Haller 1986). Hooper Brothers immediately took steps to save the vessel and its cargo, engaging a steamer, the *Chehalis*, to visit the site to attempt removal of the vessel from the rocks. Patterson, returning later with the tug *Sea Witch*, stated:

She is certainly very badly damaged and I doubt whether she can be saved. She is in no immediate danger, as the prevailing west wind will not damage her and there is but little fear of the wind shifting to the southwest at this time of year. After striking, she filled rapidly. She is only kept afloat by her lumber cargo.

By September 9, a grim prophecy for the *J M Colman* was published:

The tug *Sea Witch*, Capt. Johnson, has returned from San Miguel Island where she went ashore Sunday night. Captain Johnson was unable to get within a half-mile of the vessel, as she lies among dangerous reefs and rocks with waves breaking over her. Johnson stated that the vessel will be a total loss and that there is little chance to save the cargo [San Francisco *Call*, quoted in Haller 1986].

Again, this description suggests the northerly side of Point Bennett, for the southern side is relatively accessible and free from hazards.

Over a year later, however, salvage of the *J M Colman*'s cargo continued:

The schooner *Ellen*, Captain Vasquez, left for San Miguel Island yesterday for a load of lumber from the abandoned lumber schooner *Coleman*. Captain Vasquez has been engaged in the salvage work for some months past, and has taken a large amount of lumber from the wrecked vessel, but the *Coleman* is breaking up fast and it is not thought he will be able to make many more trips [SBNP, November 7, 1906].

A later article stated that the *Ellen* had recovered 50,000 board feet of the *J M Colman*'s cargo, and that another 100,000 board feet of salvageable lumber remained.

A photograph taken in 1914 and reproduced here as Figure 5.3, is labeled as "*Comet* wreckage" in the Channel Islands collection of the Santa Barbara Museum of Natural History. The woman in the photo had been photographed earlier at the newly wrecked *Comet*, farther north along the coast at Simonton Cove. The background of the

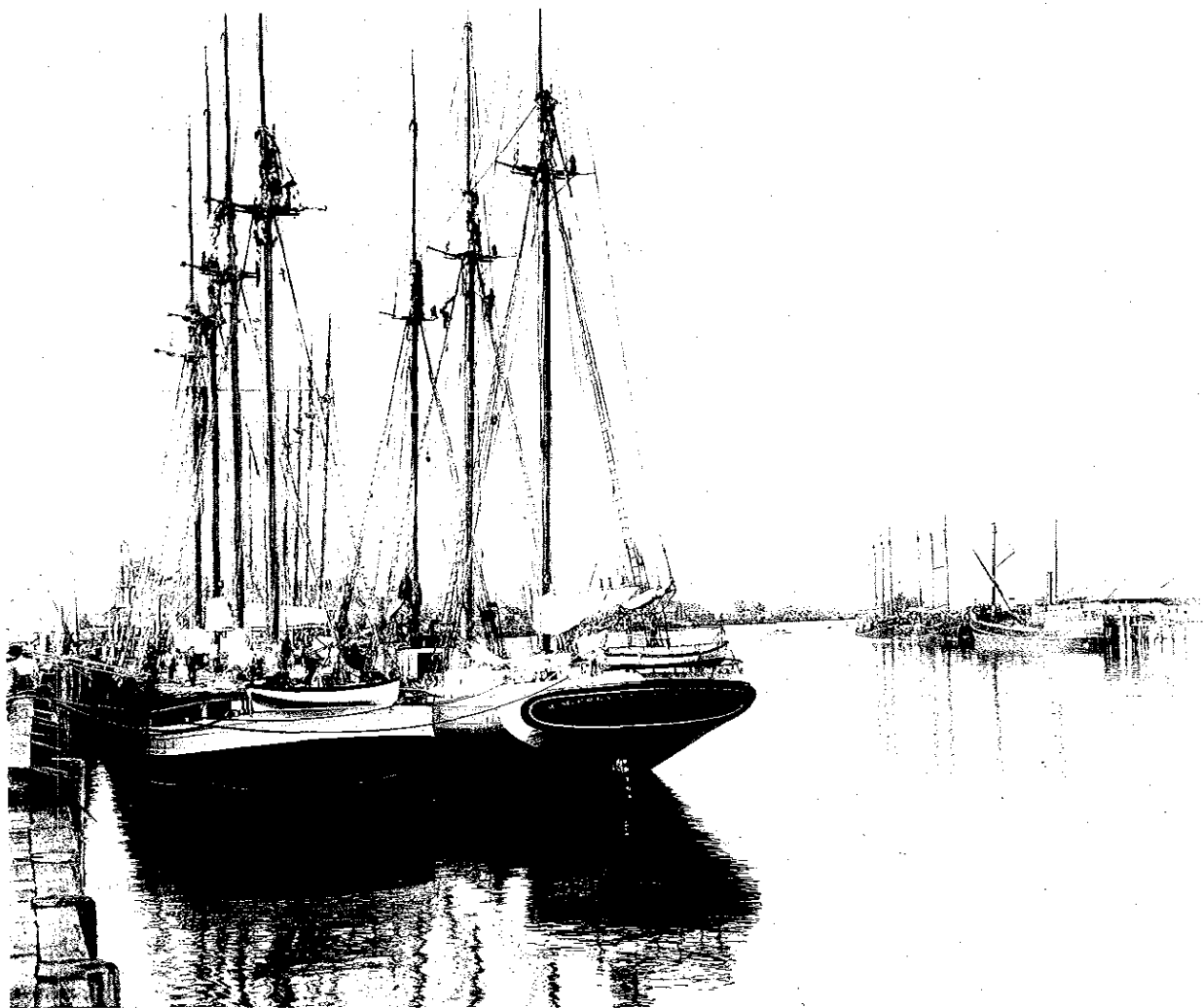


Figure 5.2. *J M Colman* at anchor, San Pedro, California. Photo courtesy of San Francisco Maritime NHP.



Figure 5.3. Driftwood camp at Point Bennett, San Miguel Island, ca. 1911. The lady in the photo appears later at the *Comet*, about three and one-half nautical miles along the coast to the northeast. Photo courtesy of the Santa Barbara Museum of Natural History.

photograph, however, conclusively demonstrates that it was taken at Point Bennett, Northwest Cove, and that it is very close to the wreck scatter now thought to be that of the *J M Colman* (Figure 5.4). The wreckage shown in the picture probably comes from several vessels.

Archeological Record

A wreck scatter in the intertidal zone at Northwest Cove, Point Bennett, San Miguel Island, is physically accessible only at low tides. Because of the need to protect breeding pinnipeds, it is administratively and legally accessible for a short period in the spring and during the month of October. Peter Howorth led the senior author to the locality in 1986; park teams visited the scatter again and

mapped the wreck scatter in 1989 and 1990. On each visit, significant new material came to light, despite very brief visits.

Principal components of the wreck scatter are shown in Figure 5.5. These include a steam donkey engine boiler, a winch cathead, the donkey engine base, and associated gears. Much more material is obscured by the abundant sea grass that grows in the area. Four hundred feet up the beach, at least four massive timbers with iron fastenings are thought to be associated with this wreck scatter. The largest is a timber 24 inches square with long iron drifts, approximately 1.25 inches in diameter, protruding from one side about 18 inches. Timbers and fastenings of this size are consistent with a vessel of the tonnage of the *J M Colman*.

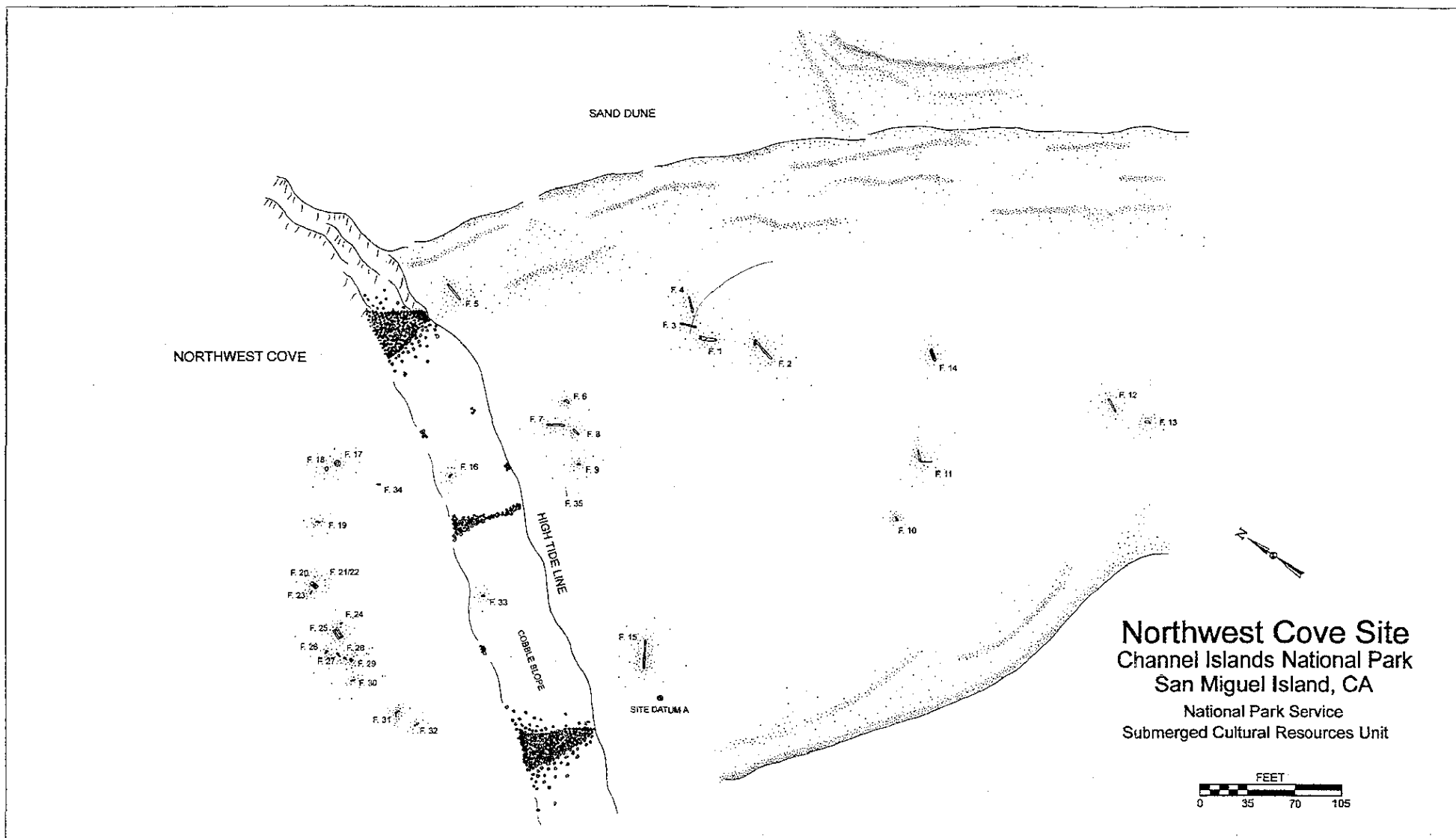


Figure 5.4. Probable *J M Colman* wreck scatter. Drawing by Matthew Russell.



Figure 5.5. Mapping the wreck scatter, Northwest Cove, Point Bennett, San Miguel Island, October 1989. Most of the wreckage is exposed only during the minus tide, and even then, marine growth conceals many pieces of wreckage. NPS photo by Mark Norder.

During the 1990 visit, archeologists located two iron hawse pipes, each 3 feet long with an interior diameter of 9 inches. Also found were additional winch parts and massive wheels fitted for pulling chain. On this visit, a metal detector indicated numerous additional metallic objects buried in the rocky intertidal area near the donkey engine parts. Matthew Russell of East Carolina University initiated a more intensive study of this wreck scatter, along with those of the *Comet* and the *Dora Bluhm*, in October 1993.

This wreck scatter is tentatively identified

as that of the *J M Colman* primarily on the basis of the donkey engine, which the *J M Colman* carried, the large hawse pipes, and the very large timbers with the appropriate size iron drifts. Figure 5.6, the historic photograph, indicates wreckage in the area earlier than 1911, so the material cannot be from either the *Watson A West*, which wrecked in 1923, or the *Comet*, which had just wrecked to the north and was photographed at the same time. The material located seems to be entirely too large and massive for the *G W Prescott*.



Figure 5.6. An additional view of driftwood at Northwest Cove, Point Bennett, San Miguel Island. Photo courtesy of Santa Barbara Museum of Natural History.

Dora Bluhm

1883-1910

Three-masted Coastal Lumber Schooner

Gross Tonnage	330.44 tons
Net Tonnage	315.51 tons
Length	133.7 feet
Beam	33.3 feet
Depth	10.5 feet
Decks	one
Official Number	157091
Construction	wood

Historical Record

"Henry K. Hall, master carpenter" built the schooner *Dora Bluhm* at Port Blakely, Washington, and launched the ship in 1883 for a group of nine owners, predominantly from San Francisco (certificate of registry, April

30, 1883). The *Dora Bluhm* may have carried a donkey engine because the first certificate of registry deducts 5.66 tons for "engine room and galley" as well as crew space of 9.27 tons. With William G. Bluhm as master (the ship was named for his daughter [Forster 1989]), the vessel was initially registered at Port Townsend, Washington. Last registered in that port in 1897, its home port was primarily San Francisco. The *Record of American and Foreign Shipping*, 1907 edition, also records that the *Dora Bluhm* carried a center board and gives the vessel a length of 127 feet. According to the *Record*, the *Dora Bluhm* was built of yellow fir (Douglas fir) and was iron fastened. The vessel had been recaulked in August 1889 and salted in May 1898.

According to a register of voyages for the years 1903 to 1910 at the Porter Shaw

Library, *Dora Bluhm* carried lumber cargoes along the West Coast, the most common ports being the Eureka and San Pedro. The vessel also stopped at Ventura, Redondo, San Diego, and Magdalena Bay along the south coast and visited the northern ports of Gray's Harbor, Bear's Harbor, Astoria, Aberdeen, and San Francisco. In the spring of 1906 and 1907, the *Dora Bluhm* was codfishing in Alaska. These trips were interspersed with voyages in which lumber was carried to the usual southern ports.

Having sailed for a number of owners and captains, the *Dora Bluhm* in 1910 was owned by Pacific States Trading Company and was captained by Oscar Johnson. It was en route to San Pedro from Coos Bay with 350,000 board feet of lumber for the Golden State Lumber Company of Los Angeles (*San Pedro Daily Pilot*, May 27, 1910).

The *Dora Bluhm* left Coos Bay for San Pedro Wednesday, May 18, and had fair weather until the morning of May 25, when she ran into a heavy gale and made slow progress until 8 o'clock p.m. when Captain Johnson was relieved by the mate. Captain Johnson states that he gave the mate his course and bearings at 8 o'clock p.m. at which time a heavy gale was blowing and a mist, or near to rain made a close look out necessary.

Captain Johnson states that at 8:45 p.m. he heard the mate order the helmsman to keep her off, and immediately went on deck to see what the trouble was.

According to his official report, he found the schooner close to the breakers and beyond control, as the

gale had increased in violence. The schooner was so close in to the breaker line, that all that was left to be done was take to the boats. When she struck, Captain Johnson let go both anchors but they could not stand the strain, and the schooner went on the reef broadside on, breaking up immediately. One man was washed overboard while the small boat was in the surf, but caught the painter, and was hauled on board escaping death by a hairsbreadth.

For sixteen hours, the eight members of the crew managed to keep the small boat from swamping, and were finally picked up by Capt. Alec Smith of the schooner *Santa Rosa Island*, and brought to San Pedro arriving here early this morning [*San Pedro Daily News*, May 27, 1910].

The wreck report filed by Oscar Johnson the same day gives the locality of the wreck as the "South point of Santa Rosa Island," while other newspaper accounts state that the vessel wrecked on either the southern or western side of the island. Since Captain Johnson could not fix his position accurately in the darkness and rain, there is understandable uncertainty about the location of the wreck. Howorth and Hudson (1985) place the *Dora Bluhm* near Bee Rock, off Santa Rosa Island.

Archeological Record

Howorth and Hudson's location is described as "west (264 degrees magnetic) from Bee Rock about .2 nautical miles" at a depth of about 50 feet (Howorth and Hudson 1985) (Figure 5.7). The NPS conducted a closely spaced unpositioned magnetometer

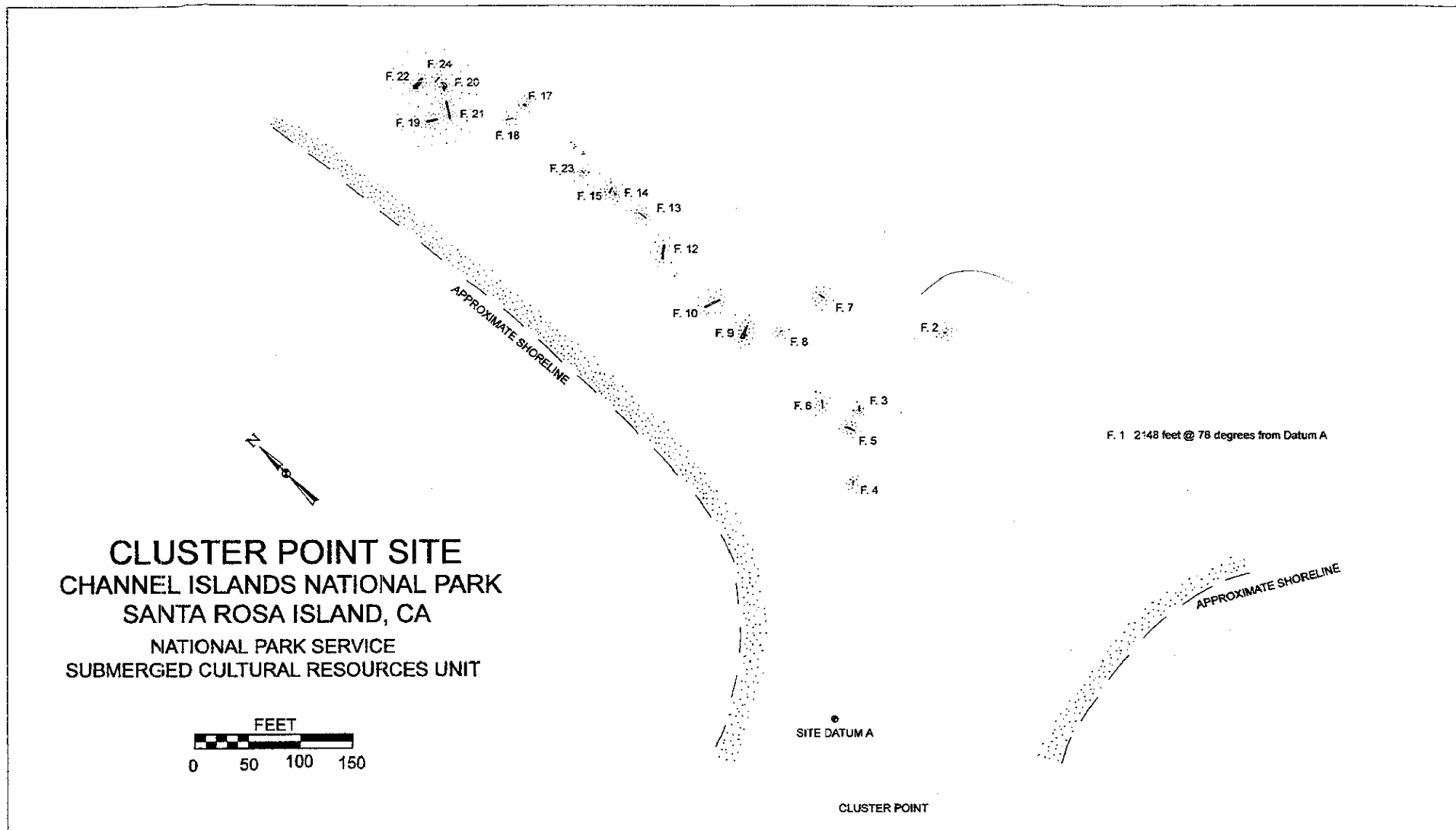


Figure 5.7. Probable *Dora Bluhm* wreck scatter. Drawing by Matthew Russell.



Figure 5.8. Well weathered wreckage fragment, Cluster Point. This material most likely pertains to the *Dora Bluhm*. NPS photo by Don Morris.



Figure 5.9. Overall view of Cluster Point, Santa Rosa Island, looking southwest. Most wreckage is concentrated in the midground of the photo. NPS photo by Don Morris.

survey over this location with negative results on August 10, 1985. An additional magnetometer survey in 1989 and exploration dives centered on the appropriate depth in 1988 and 1989, searching the area completely around Bee Rock, failed to disclose any wreckage.

Shoreline surveys near Cluster Point have proven more successful. Considerable material exists in the vicinity of Cluster Point and along the shoreline toward Bee Rock and south toward the *Chickasaw* and South Point. While Cluster Point snares debris of all kinds and periods, timbers of a wooden, iron-fastened vessel are quite prominent in the clutter. Several of these are illustrated in Figure 5.8. These timbers all show a similar and rather high degree of weathering and all are fastened with large iron bolts and other fastenings. Largest among them is a Douglas fir timber with fastenings set in parallel staggered rows, similar to timbers in the keelson assembly of the *Jane L Stanford*. No fastenings remain in this piece, although rust stains in association with the fastening holes indicate that iron material was used. Fastening size, as best determined from empty holes, was 1.25 inches. Other scattered pieces recorded in the area are illustrated in Figure 5.9. The construction contract for the vessel specified "keelson 16 x 16 inches, sister keelson 12 x 18 inches," and further stipulated "keel, keelson, stem, and stern-post to be fastened

At China Camp, just south of Cluster Point, a mast band with an internal diameter of 21.5 inches now serves as a campfire ring (Figure 5.10). This item has clearly been moved overland from whatever beach it washed up on, but it is likely that this beach was near China Camp. The interior dimension of this piece shows on the *Dora Bluhm*'s contract as both the heel diameter of the

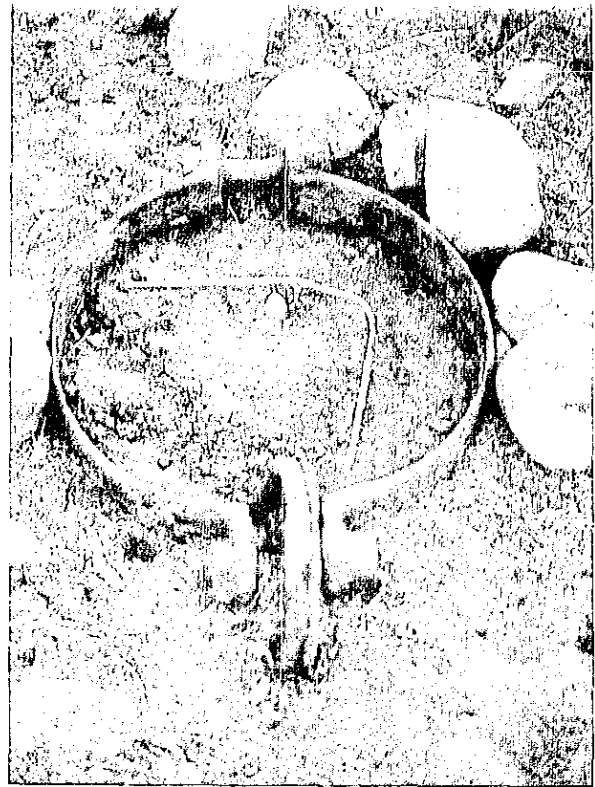


Figure 5.10. Mast band recycled as a fireplace ring, China Camp, Santa Rosa Island. Measurements of this piece indicate it would be compatible with the masts of the *Dora Bluhm*. NPS photo by Don Morris.

foremast and the diameter of the mizzenmast. This piece is of an appropriate size for the *Dora Bluhm*. Farther south along the beach an iron hawse pipe, 41 inches long and 9.5 inches outside diameter, is firmly wedged in beach boulders (Figure 5.11).

Near South Point, a single-hole lignum vitae deadeye, or heart, was collected above the high tide line in October 1988. The construction contract for the vessel specified "standing rigging 7 1/8 inches of hemp, four shrouds on each side to fore and main mast and three on each side to mizzen mast," indicating that this fitting might be consistent with the rigging of the *Dora Bluhm*. This



Figure 5.11. Hawse pipe in the rocks, about two statute miles southeast of Cluster Point. NPS photo by Don Morris.



Figure 5.12. Rudder post and yoke on the beach northwest of Cluster Point. The square hole in the post may have accommodated an emergency tiller. NPS photo by Don Morris.



Figure 5.13. End view of the rudder yoke. NPS photo by Don Morris.

type of artifact, however, can drift a long way from its original wreck site and is hardly unique to this vessel, so any association must remain extremely tenuous.

On the coast north of Cluster Point, the unusual fitting illustrated in Figure 5.12 and 5.13 appeared in the summer of 1988. William Olesen of the Los Angeles Maritime Museum identified this fitting as a rudder post and yoke typical of diamond-cut steering gear. The construction contract specified that "hard wood" was to be used for the rudder post, among other pieces of the vessel. The wood in this fitting is described in the senior author's field notes as "open porous wood, similar to oak" and is almost certainly a hardwood species. This fitting is of an appropriate size and type for the *Dora Bluhm*.

Standard tables in *Record of American and Foreign Shipping* (1907) and in Desmond (1984) specify dimensions and sizes for many of the foregoing items, usually related to a vessel's gross tonnage. Although it would be naive to assume that any builder necessarily adhered to these specifications, the tables allow us to develop a general model of the vessel from which these individual pieces might derive, and perhaps to determine

whether or not the assemblage represents only one vessel. The sizes of the larger fittings and timbers found in this area are compatible with those from a vessel like the *Dora Bluhm*.

Although most of the pieces of wreckage may belong to the *Dora Bluhm*, wreckage from other vessels may be intermingled with the main wreck scatter. Consider this short article from the *Santa Barbara Morning Press* (November 3, 1906):

Heavy west-nor'west gales have been blowing in the channel near the islands for several days past, and Captain Robards states that he had to lie under the east end of Santa Cruz for several days for safety. Captain Robards says that the wreckage of the *Shasta*, which went to pieces near Point Conception several weeks ago, is still in evidence, the greater part of the pilot house of the ill-fated schooner being now stranded on Bee Rock on the south side of Santa Rosa Island.

Clearly, wooden wreckage can drift a long way, over 30 miles in this instance. The *Shasta*, a wooden steam schooner, has also contributed to the coastal woodpile at Cluster Point.

Comet
1886-1911

Three-masted Coastal Lumber Schooner

Gross Tonnage	429 tons
Net Tonnage	368 tons
Length	144.6 feet
Beam	35.2 feet
Depth	11.4 feet
Decks	one
Official Number	126379
Construction	wood

Historical Record

Hall Brothers of Puget Sound, Washington, built the *Comet* for Hooper Brothers of San Francisco, who remained owners throughout its life (Figures 5.14 and 5.15). Fortunately for this report, the contract under which it was built has survived and is reproduced as Appendix E. The *Comet* is one of three vessels built by Hall Brothers that wrecked within the park, the others being the *J M Colman* and the *Dora Bluhm*. The vessel carried three anchors of 1,800, 1,550, and 400 pounds, respectively, 60 fathoms each of 1 $\frac{3}{8}$ -inch and 1 $\frac{1}{4}$ -inch chain, wire rigging, custom-made blocks, and cotton sails. The specification "forward house to be adapted for donkey engine" suggests that this useful appliance was carried, as well as "diamond cut screw steering gear," "#3 capstan and patent traveler for spanker," and a "water-closet and stationary wash-bowl complete." Caulking was cement below the water line and white lead above. All fastenings were iron, ranging in size from $\frac{7}{8}$ inch to 1 $\frac{1}{4}$ inch. One-and-one-quarter-inch treenails were specified for fastening the planking. Like others of its trade, the *Comet* possessed bow and stern ports for easier loading of long lengths of timber.

A partial list of the *Comet's* voyages shows it active in the coastal lumber trade, picking up cargo at Port Ludlow, Port Blakely, Aberdeen, and Gray's Harbor and delivering to San Diego, San Pedro, and Santa Barbara. Only five times in eight years did the *Comet* call in at San Francisco, its home port. Several pictures show the *Comet* in active service.

The *Comet* struck Wilson Rock at 8:00 P.M. on August 30, 1911, while sailing in fog (Figure 5.16). The disabled vessel then stranded on San Miguel Island at Simonton

Cove. In contrast to the good fortune of other crews whose ships wrecked in the park, one of the *Comet's* crew of eight, a hand from Germany, perished. Captain Borgenson stated that a faulty chronometer, borrowed while the ship's regular instrument was being adjusted, put the vessel 8 miles out its course.

Heavy surf in the area rendered salvage of the cargo impossible. It seems highly probable that at least some of the 500,000 board feet carried by the *Comet* ended up in the new ranch buildings constructed during this period on San Miguel Island by Captain Waters.

Archeological Record

For several years, a large anchor has been exposed on the upper beach at Simonton Cove

(Figures 5.17, 5.18 and 5.19), just north of the range poles denoting the boundary of the San Miguel Danger Zone. In 1977 and again in 1984, the beach around this anchor lost enough sand to expose the numerous items associated with it. These included a large capstan (Figure 5.20) and a great deal of timber from the bow. The series of photographs taken just after the vessel wrecked identify this wreck conclusively as that of the *Comet*. Particularly important is the background of Figures 5.21 and 5.22. The distinctive ledge shown here can easily be identified just northeast of the anchor stock. Also crucial is a photograph of the capstan near the anchor, which was taken by park ranger Reed McCluskey in 1984. Note how precisely it compares with the capstan on the

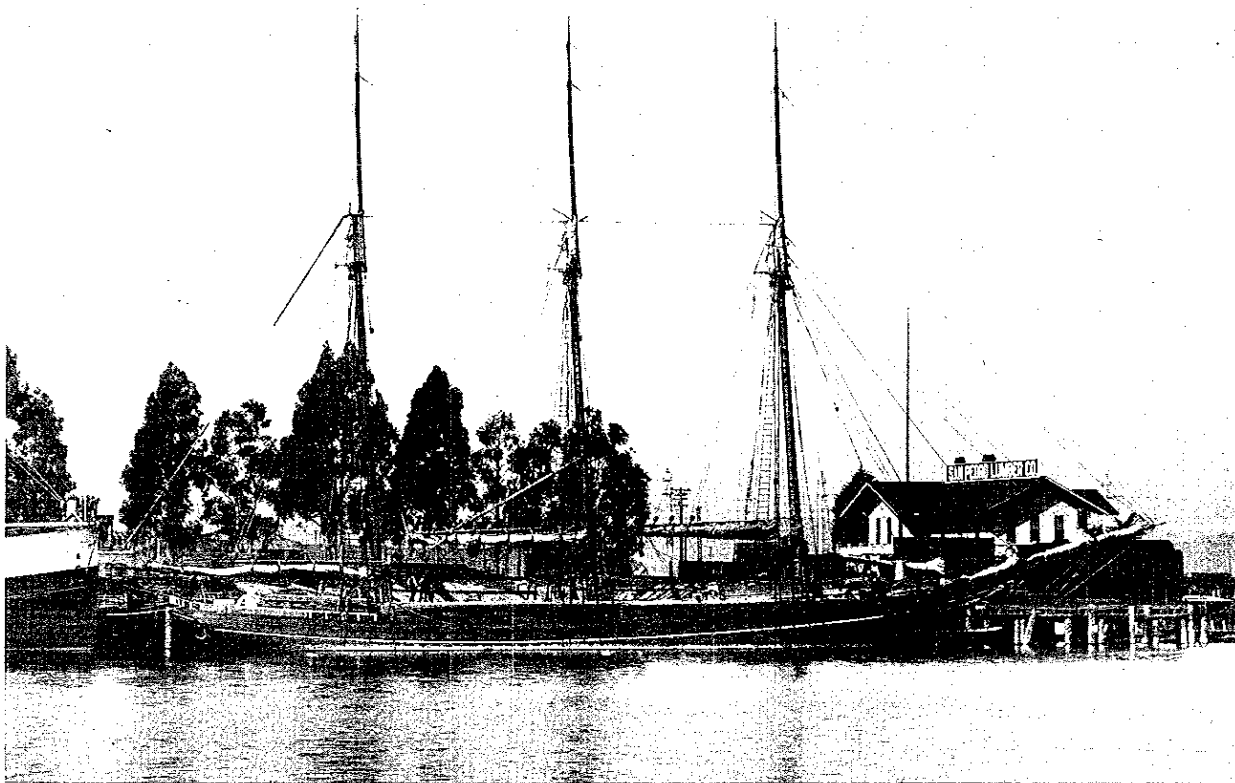


Figure 5.14. Schooner *Comet* docked at San Pedro, California, with a load of lumber. Photo by William Phelps, courtesy of San Francisco Maritime NHP.

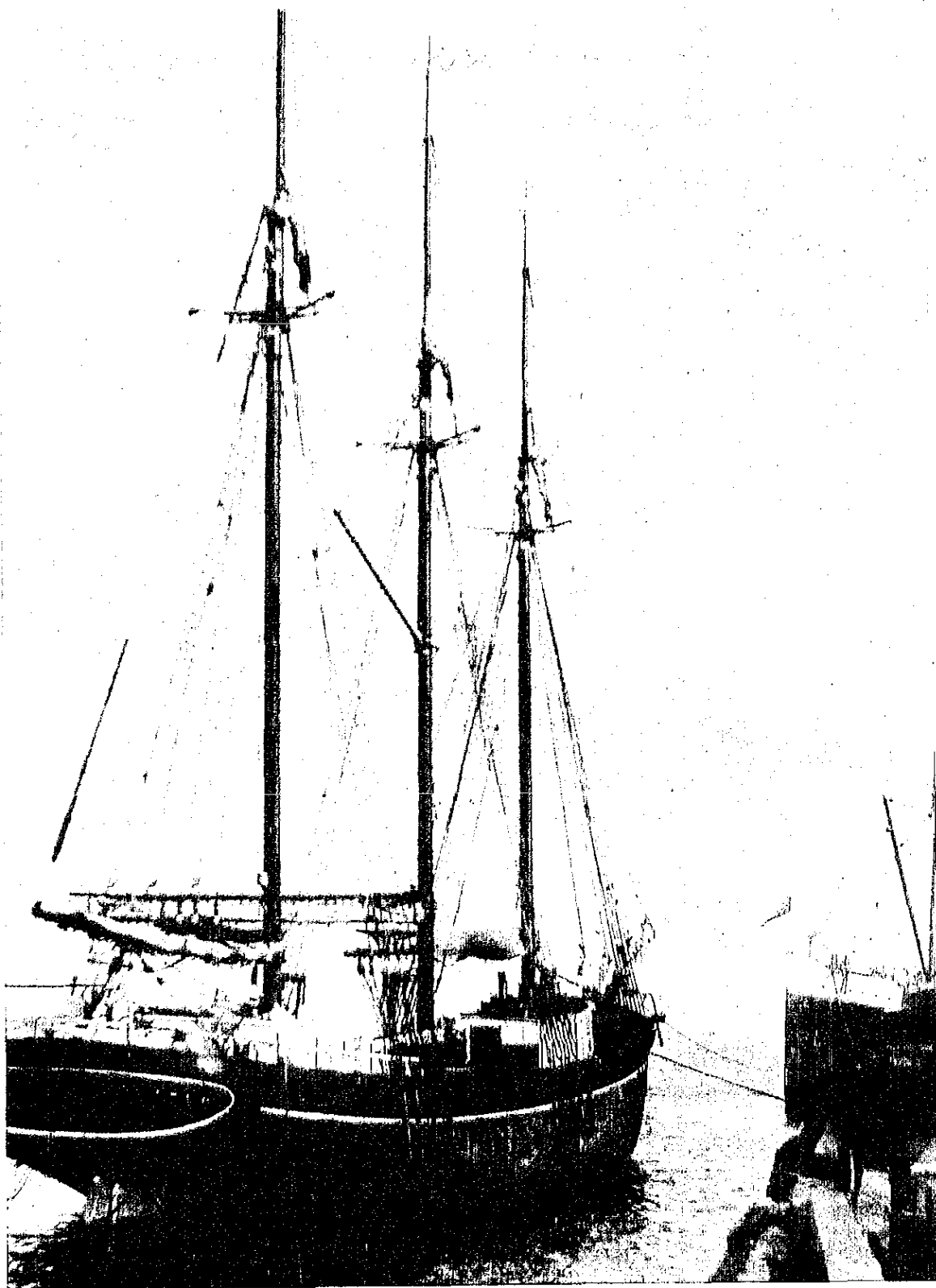


Figure 5.15. *Comet* at Santa Barbara, 1905. The bow of the steamship *Santa Rosa* appears at the extreme right. Photo courtesy of San Francisco Maritime NHP.

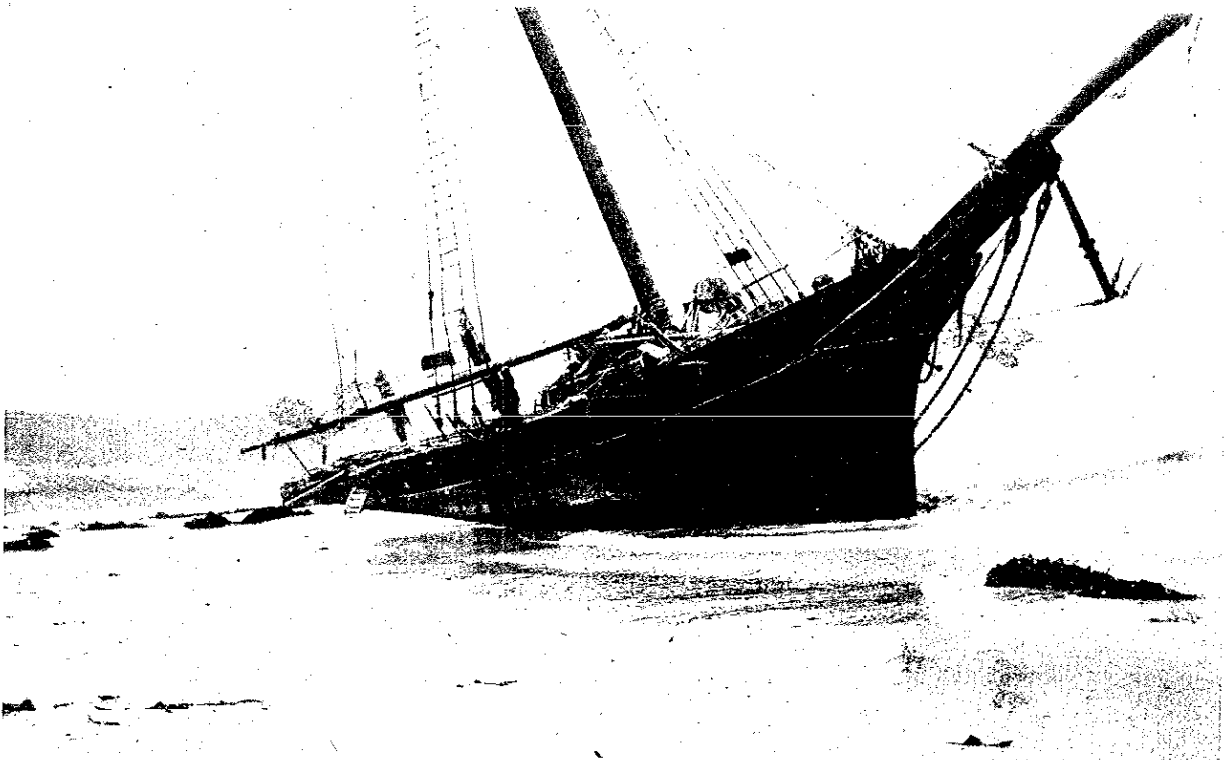


Figure 5.16. *Comet* aground at Simonton Cove, San Miguel Island. Photo courtesy of Santa Barbara Museum of Natural History.



Figure 5.17. Anchor and background at Simonton Cove, 1980s. Compare with Figures 5.21 and 5.23. NPS photo by Don Morris.



Figure 5.18. Overall view of exposed wreckage. NPS photo by Reed McCluskey.



Figure 5.19. 1984 view of wreckage. NPS photo by Reed McCluskey.

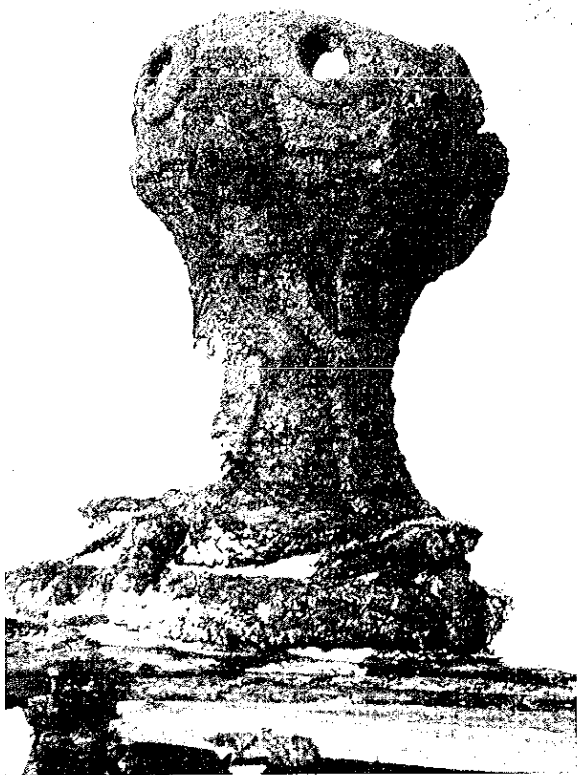


Figure 5.20. 1984 closeup of capstan. Compare to capstan pictures in Figures 5.21 and 5.23. NPS photo by Reed McCluskey.



Figure 5.21. Unidentified lady on foredeck of the *Comet*. Compare capstan and background with modern photographs of the Simonton Cove wreck scatter. Photo courtesy of Santa Barbara Museum of Natural History.

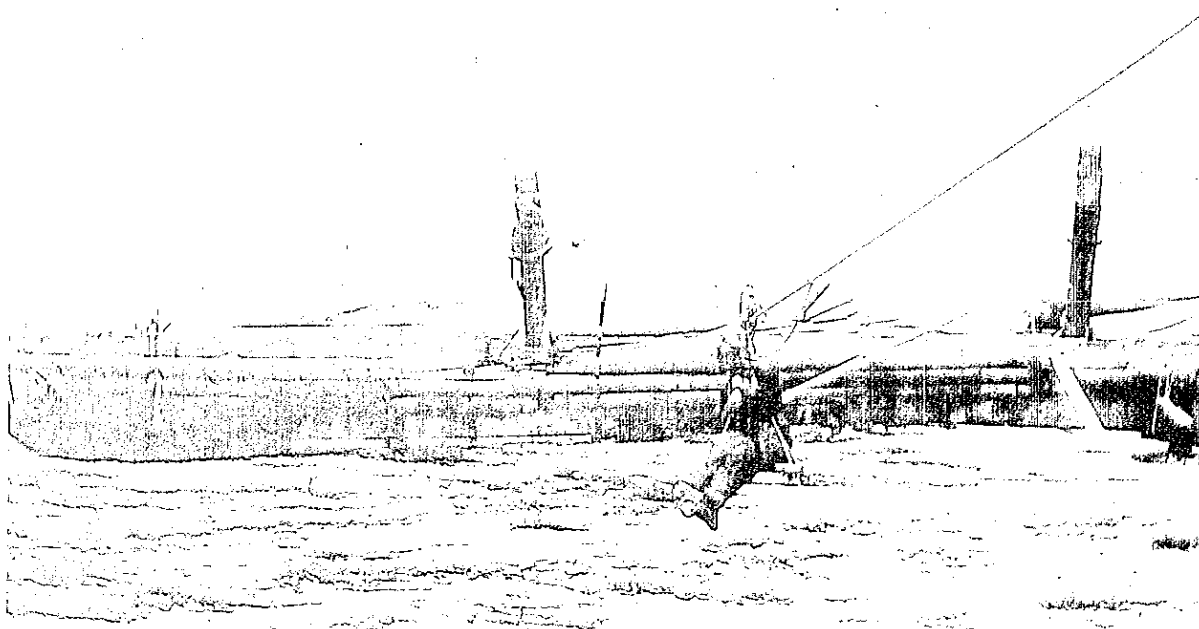


Figure 5.22. Another view of the *Comet*. Much of the deck load remains. Photo courtesy of Santa Barbara Museum of Natural History.

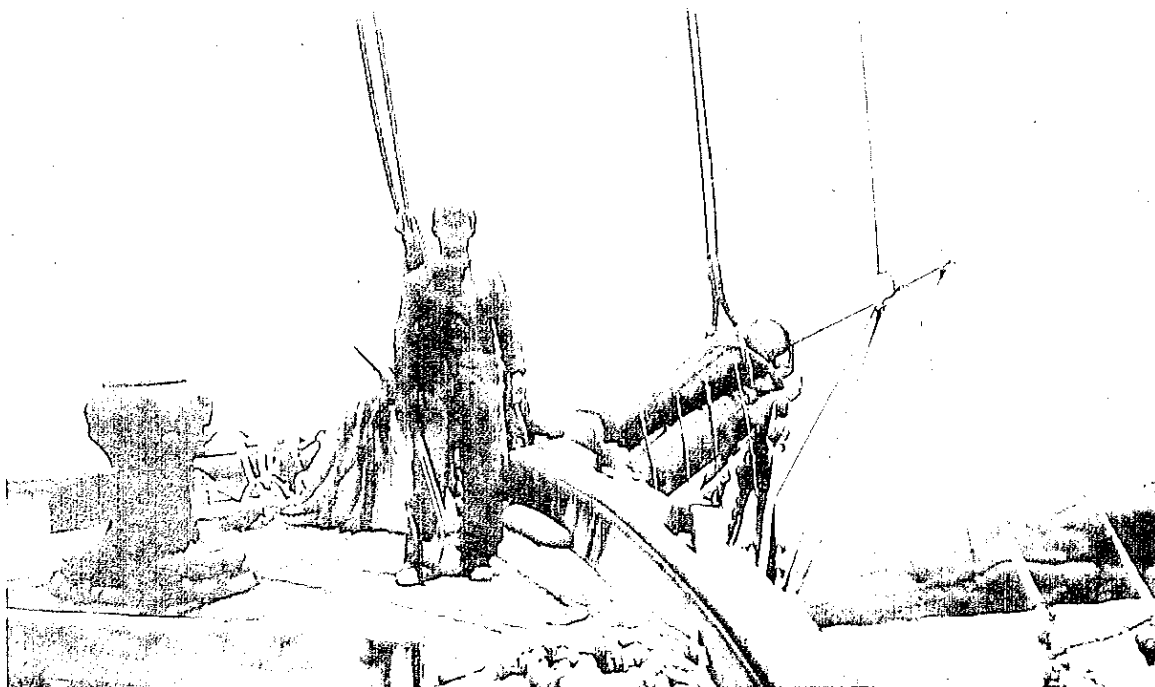


Figure 5.23. Unidentified man on the *Comet* foredeck. Note the ledge in the background just below the tip of the bowsprit. Photo courtesy of Santa Barbara Museum of Natural History.



Figure 5.24. Hulda and Otto Lembke aboard the *Comet* at Santa Barbara, 1905. Photo courtesy of San Francisco Maritime NHP.

foredeck of the *Comet* shown in Figure 5.23. A great deal of material, especially wooden timbers, probably lies in the vicinity, concealed by sand and ice plants. Only cursory probing of the sands at the wreck site of the *Comet* had occurred until Matthew Russell began work there in 1993 in an attempt to locate the capstan and other major pieces of wreckage shown in the 1977 and 1984 photographs (Figure 5.24).

Watson A West
1901-1923
Four-masted Coastal Lumber Schooner

Gross Tonnage	818 tons
Net Tonnage	747 tons
Length	192.5 feet
Beam	40.0 feet
Depth	14.2 feet
Decks	one
Official Number	81782
Construction	wood

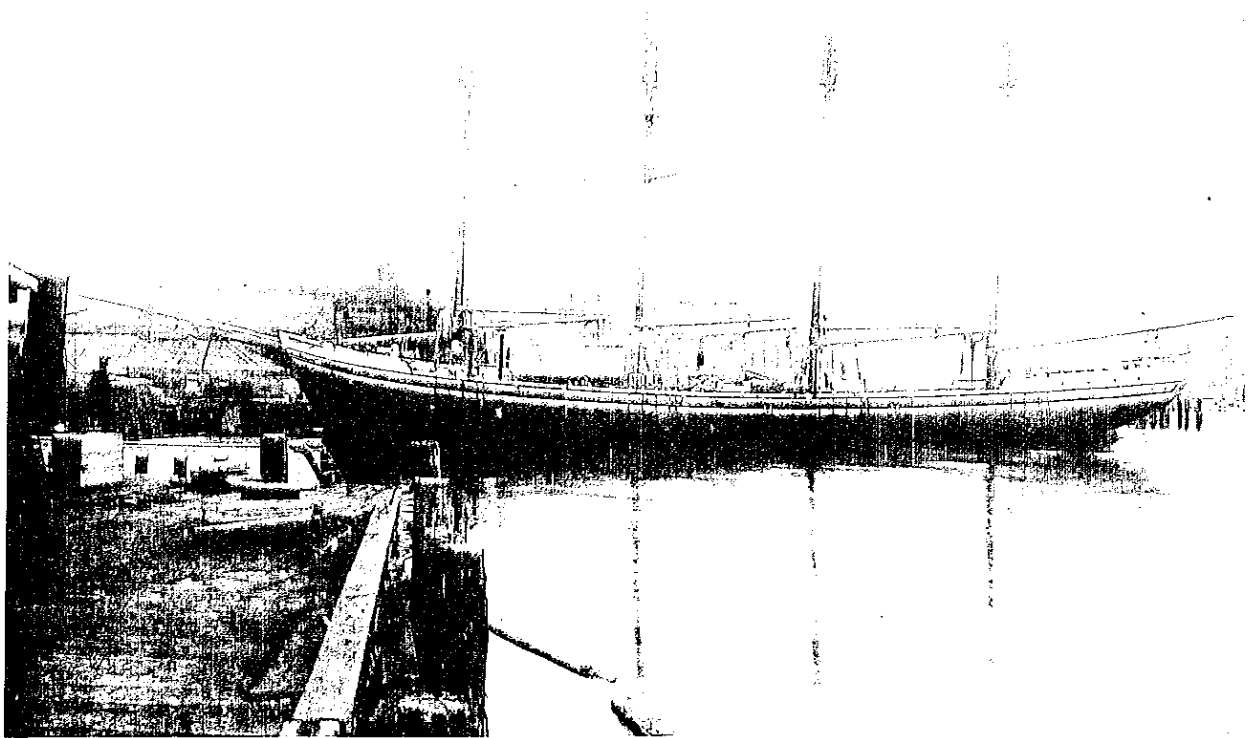


Figure 5.25. *Watson A West*, location unidentified. Photo courtesy of San Francisco Maritime NHP.

Historical Record

W. H. McWhinney built the *Watson A West* at Aberdeen, Washington, launching it in 1901 (Figures 5.25 and 5.26). Despite the relatively late construction date, the certificate of enrollment does not list a donkey engine as present on the boat when launched, nor does one appear on any of later certificates. There have been twenty owners of record, including John H. Petersen. Originally registered in Port Townsend, it was briefly registered in Honolulu (1903, 1905), San Francisco (1905, 1911, 1922), Seattle (1913, 1921), and Port Angeles, Washington, where in 1913 it was

owned by Pacific Freighters Company, Inc. The ship was licensed at various times for ocean freight or the coasting trade and was last licensed in Honolulu in December 1922.

During its career, the *Watson A West* not only delivered lumber to the usual southern California ports several times but also made many international voyages—to Australia, Peru, Chili, South Africa, Singapore, the Philippines, and Japan, as well as Guaymas, Mexico.

The *Watson A West* was carrying 800,000 board feet of lumber from Gray's Harbor to San Pedro when it struck the west end of San Miguel Island at 11:30 P.M. on February 23,

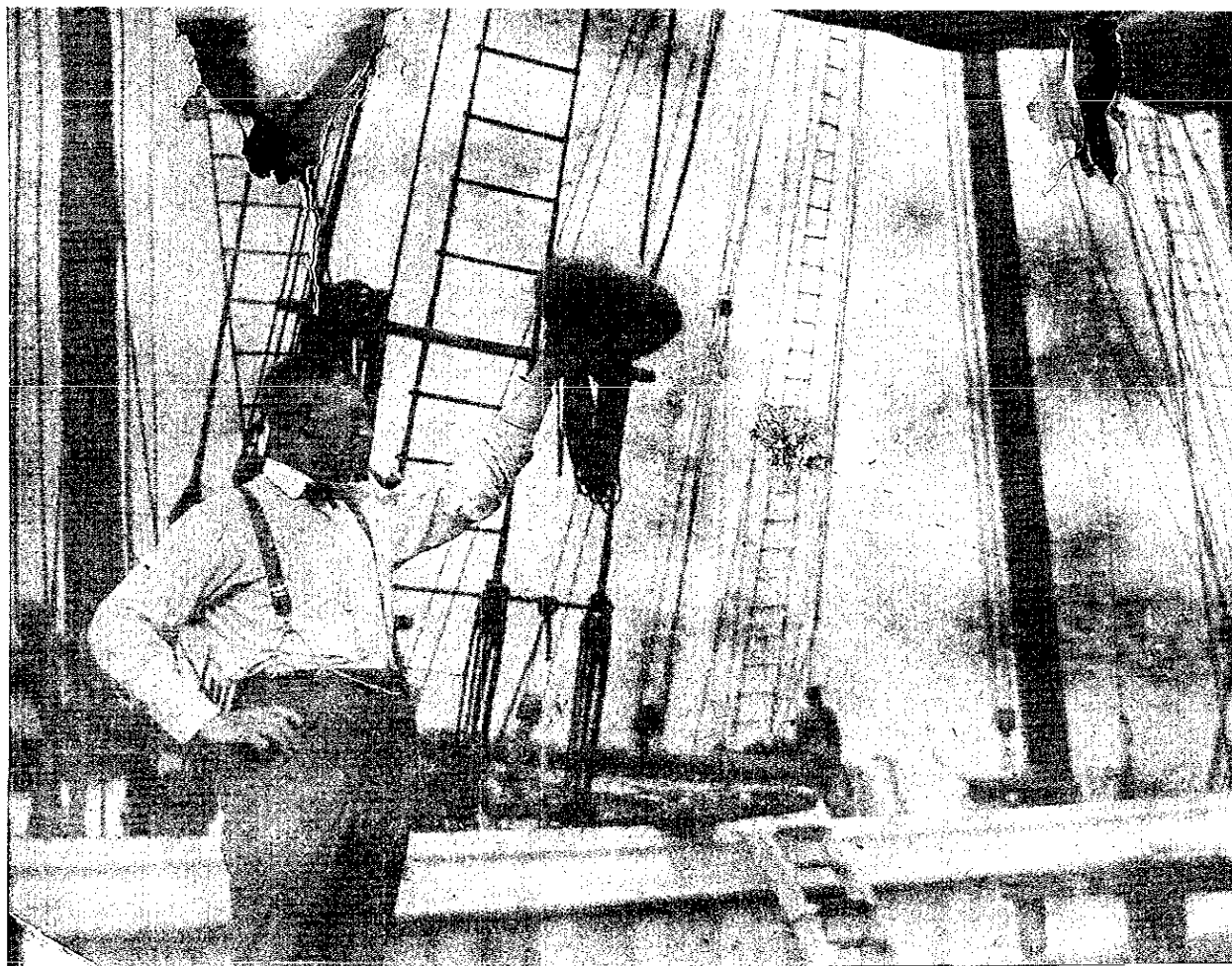


Figure 5.26. Captain Sorensen on deck of the *Watson A West*, location unidentified. Photo courtesy of San Francisco Maritime NHP.

1923, breaking apart immediately. Fog, restricting visibility to "less than a boat length," once again was a factor. "She struck so hard the men in their berths were thrown out and instantly she broke and began to fill with water" (SBMP, February 25, 1923).

The crew scrambled into the ship's boat and rowed for the next 18 hours, finally reaching Santa Barbara "exhausted, hungry, thirsty, half-clad." Captain Sorensen had time to secure only a chart, chronometers, and a compass during the hasty evacuation.

The wreck scatter of the *Watson A West* has not yet been located, although it lies

somewhere near Point Bennett.

Jane L Stanford
1892-1929

Trans-Pacific Lumber Carrier
Four-masted Barkentine

Gross Tonnage	970 tons
Net Tonnage	861 tons
Length	215.5 feet
Beam	41 feet
Depth	17 feet
Decks	one
Official Number	77070
Construction	wood, iron fastened

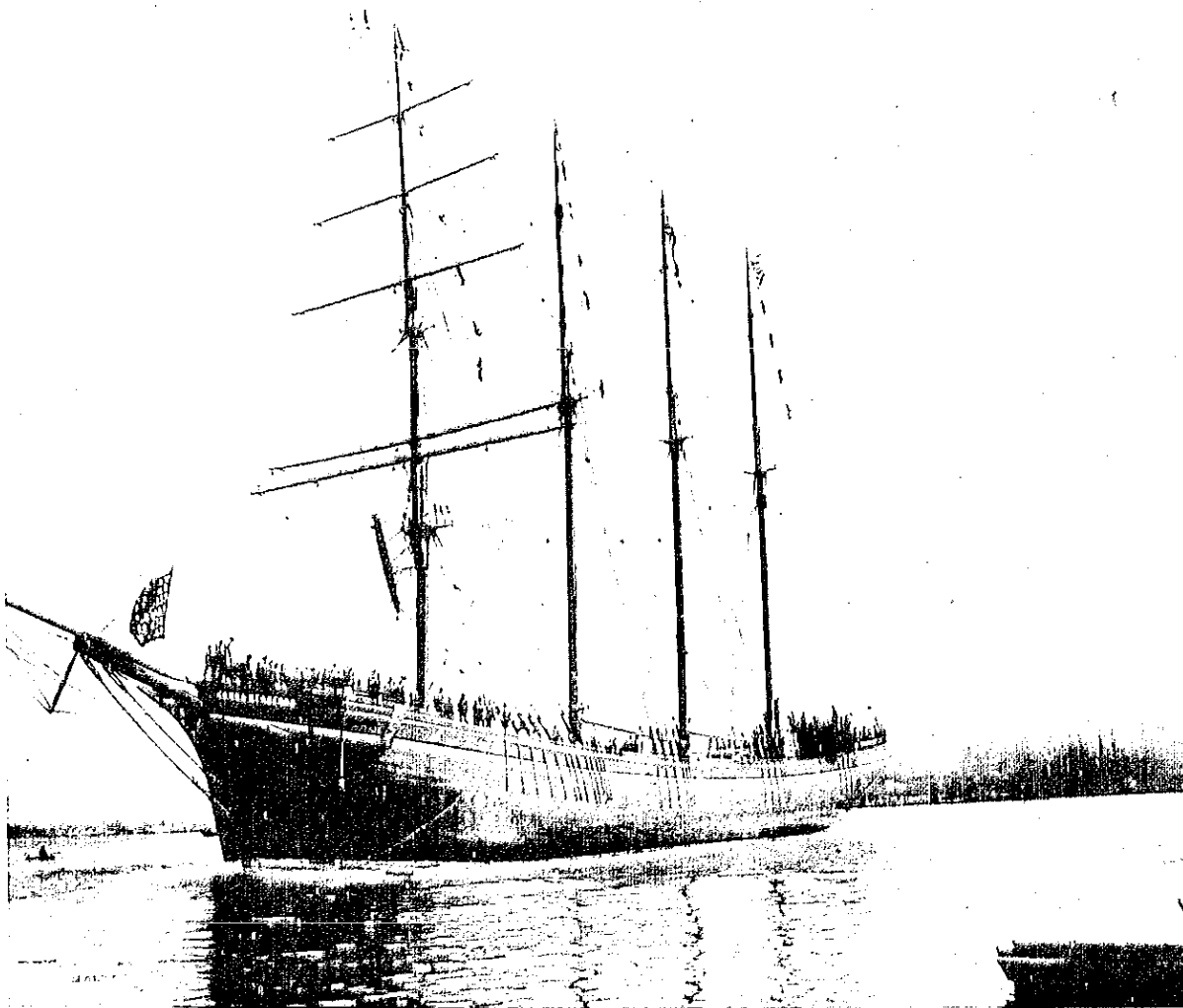


Figure 5.27. Launching of *Jane L. Stanford*. Photo courtesy of San Francisco Maritime NHIP.

Historical Record

Hans Bendixsen built the four-masted barkentine *Jane L. Stanford* at Fairhaven, California, in 1892 (Figures 5.27, 5.28, 5.29 and 5.30). Although frequently cited as the largest vessel constructed on the West Coast at the time it was built (Lyman 1941), it was exceeded by at least 100 tons by the *Wildwood*, built in Oregon some 20 years earlier (Whitman 1989; Hopkins 1874).

The vessel presented a beautiful appearance this morning. She is

painted dark green on the outside to the waterline, below which she is copper painted. . . . The vessel is fitted with the latest steam hoisting and pumping apparatus. The sails will also be raised by steam. In the forward deckhouse, the donkey engine is located; the galley in front of the engine room, and the sailor's quarters forward. . . . The cabins are elegantly finished in maple, walnut, and oak and will be furnished in a like manner. The after-cabin is finished in white and gold. There are six

staterooms here, a bath and toilet room, pantry, etc. [*Humboldt Standard*, December 20, 1892].

A barkentine is a vessel whose foremast carries square sails and that has at least two aftermasts rigged with fore and aft sails, schooner fashion. The rig attempts to combine the downwind ability of the square-rigger with the handiness of a schooner. A two-masted vessel rigged in this manner is a brigantine.

Launched with a capacity of 1,200,000 board feet, the *Jane L Stanford* was employed in the trans-Pacific lumber trade (Figure 5.31). Its barkentine rigging increased the speed on these predominantly downwind runs. The ship's first voyage was to Sydney, Australia, under managing owner J. J. Smith of San Francisco, and the vessel carried

lumber (*Humboldt Standard*, December 20, 1892). It traveled to numerous Pacific ports (China, Australia, Hawaii) with occasional coastwise passages to southern California. The *Jane L Stanford* recorded voyages do not include any coastwise passages to southern California. While it is nowhere stated explicitly, the *Jane L Stanford* might have carried cargoes of coal outbound from Australian ports and sugar from Hawaii to San Francisco, a typical triangular trade for that time, although transporting coal in wooden vessels was not a safe practice.

Carol Jung, the captain's daughter, lived on board the *Jane L Stanford* during this period for the first 7 years of her life. She recalls flowers growing in pots in the cabin skylights and brass polished daily in a bright, cheery, clean, and well-maintained vessel that rarely encountered storms during voyages. As

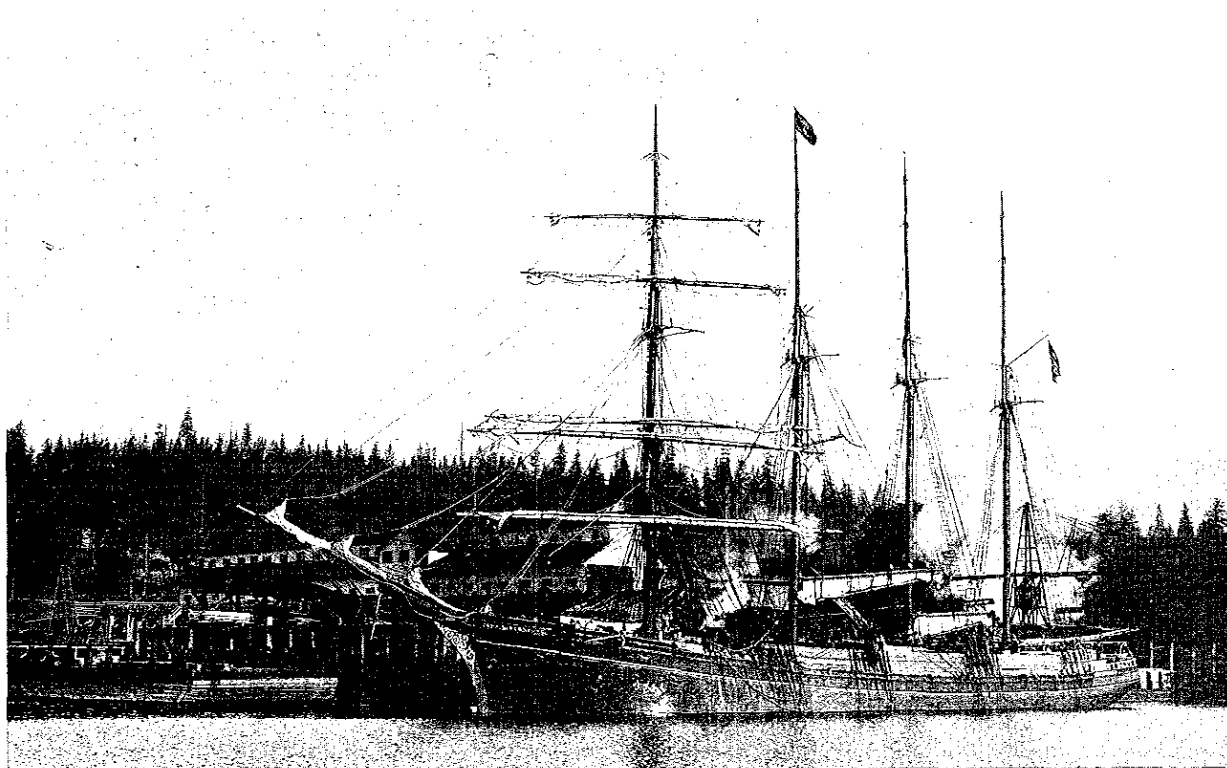


Figure 5.28. *Jane L Stanford* at Dollarton, British Columbia. Photo courtesy of San Francisco Maritime NHP.

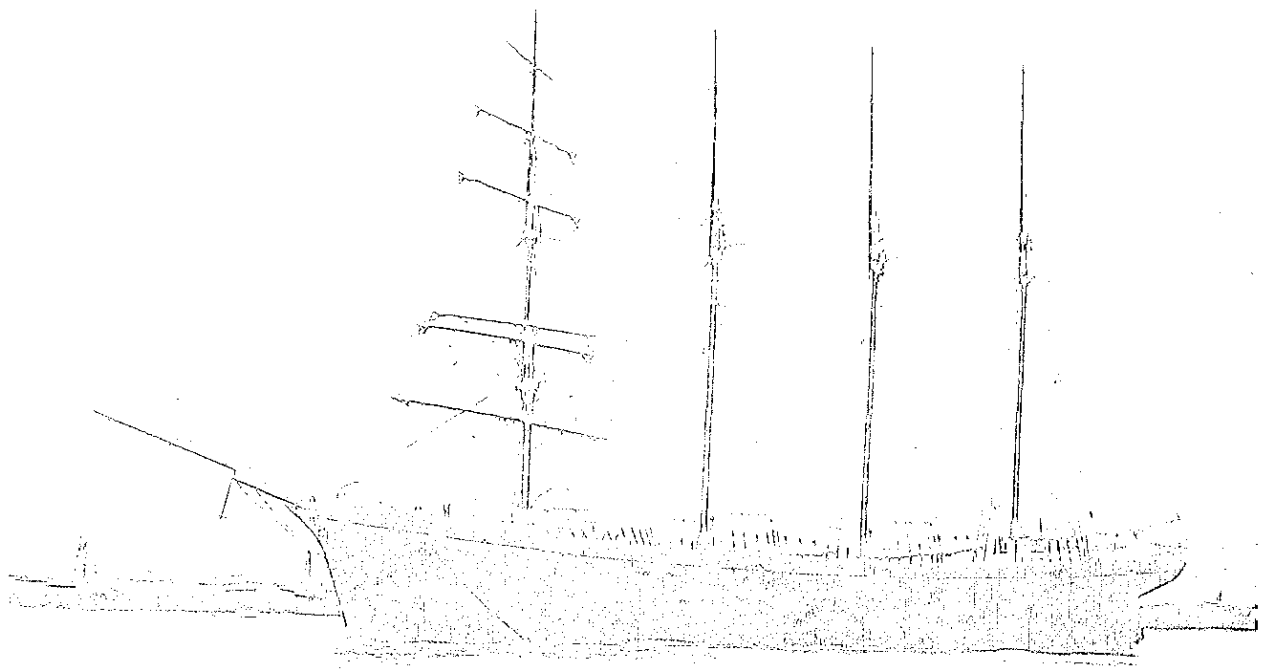


Figure 5.29. *Jane L. Stanford*, Puget Sound, ca. 1910-1915. Photo courtesy of San Francisco Maritime NHP.

a young girl growing up on the quarterdeck, she remembers playing with dried shark's eyes for marbles and shark vertebrae strung into necklaces. On two occasions, while en route to Australia, the *Jane L. Stanford* visited Pitcairn Island (Carol Jung interview, October 1992). Cape Horn seas swept her father overboard on his last projected voyage before retirement in 1917.

During World War I, S. E. Slade owned the vessel, but he sold it in 1917 to Pacific Freighters Company. In 1919, Robert Dollar bought the *Jane L. Stanford* (Lyman 1941).

This burst of activity during World War I reflects the extraordinary shipping boom and speculative fever of the time, when high cargo rates often allowed recovery of capital costs, as well as profit, on just one voyage (Greenhill 1980:49). This situation prolonged the careers of many older ships that might otherwise have been scrapped. The *Jane L. Stanford* made a last voyage under sail in 1920, as the shipping boom cooled, thereafter being laid up in San Francisco Bay (Whitman 1989). In 1926, the *Jane L. Stanford* was moved from San Francisco Bay and became a

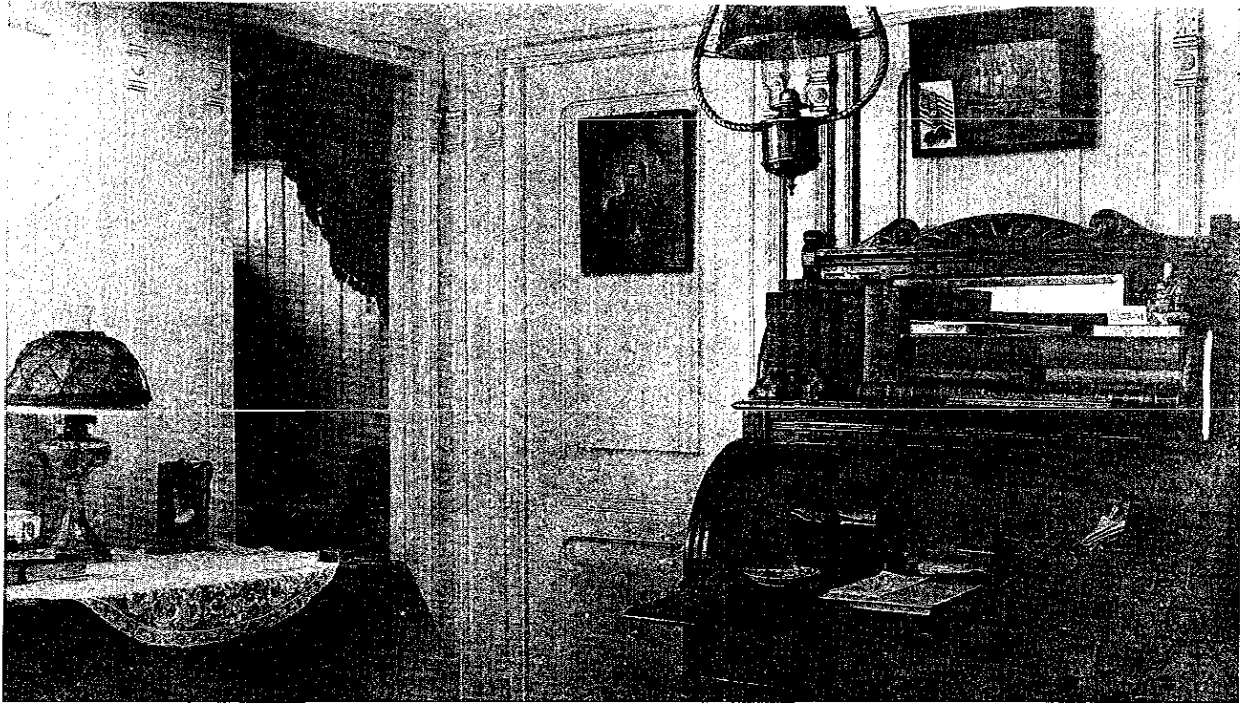


Figure 5.30. Cabin of the *Jane L Stanford*. Photo courtesy of San Francisco Maritime NHP.

fishing barge, first at Los Angeles and later near Santa Barbara. At this time, the masts and rigging were removed.

On August 30, 1929, the steamer *Humboldt* rammed the anchored and lighted *Jane L Stanford* while entering Santa Barbara, plunging "more than eight feet into the *Stanford*'s side" and creating a gaping hole. The wreck report of the *Humboldt* claims the *Jane L Stanford* carried no lights. "Because of its wooden construction and the fact that it has no engine, it is not expected to sink, marine authorities said" (LAT, September 1, 1929). This proved to be a distressingly apt prediction. During this time, personal effects of the crew that had been on board were salvaged by divers.

After floating, decks awash, for two weeks (LAT, September 21 and September 29, 1929), the damaged wooden hulk was towed to Santa Rosa Island by the Coast Guard for

destruction on September 15. The crew of the Coast Guard cutter *Tamaroa* placed 12 94-pound TNT high-explosive mines in the hulk. The resulting explosion "hurled parts of the barge over a space of more than two miles, scattering pieces of the wood and metal along the beach" and "caused some alarm among housewives [in Santa Barbara], who kept police busy answering telephone calls" (LAT, September 19, 1929). This article mentions that a "huge boiler" blew more than 20 feet high in one blast, indicating that the *Jane L Stanford* retained its donkey engine until the end. It must have been a noisy morning, for the article notes that the battleship *West Virginia* was at target practice in the vicinity as well.

The log book entries of the *Tamaroa* give many details pertinent to locating additional wreckage from the *Jane L Stanford*. The initial step in demolishing the hulk was to fire

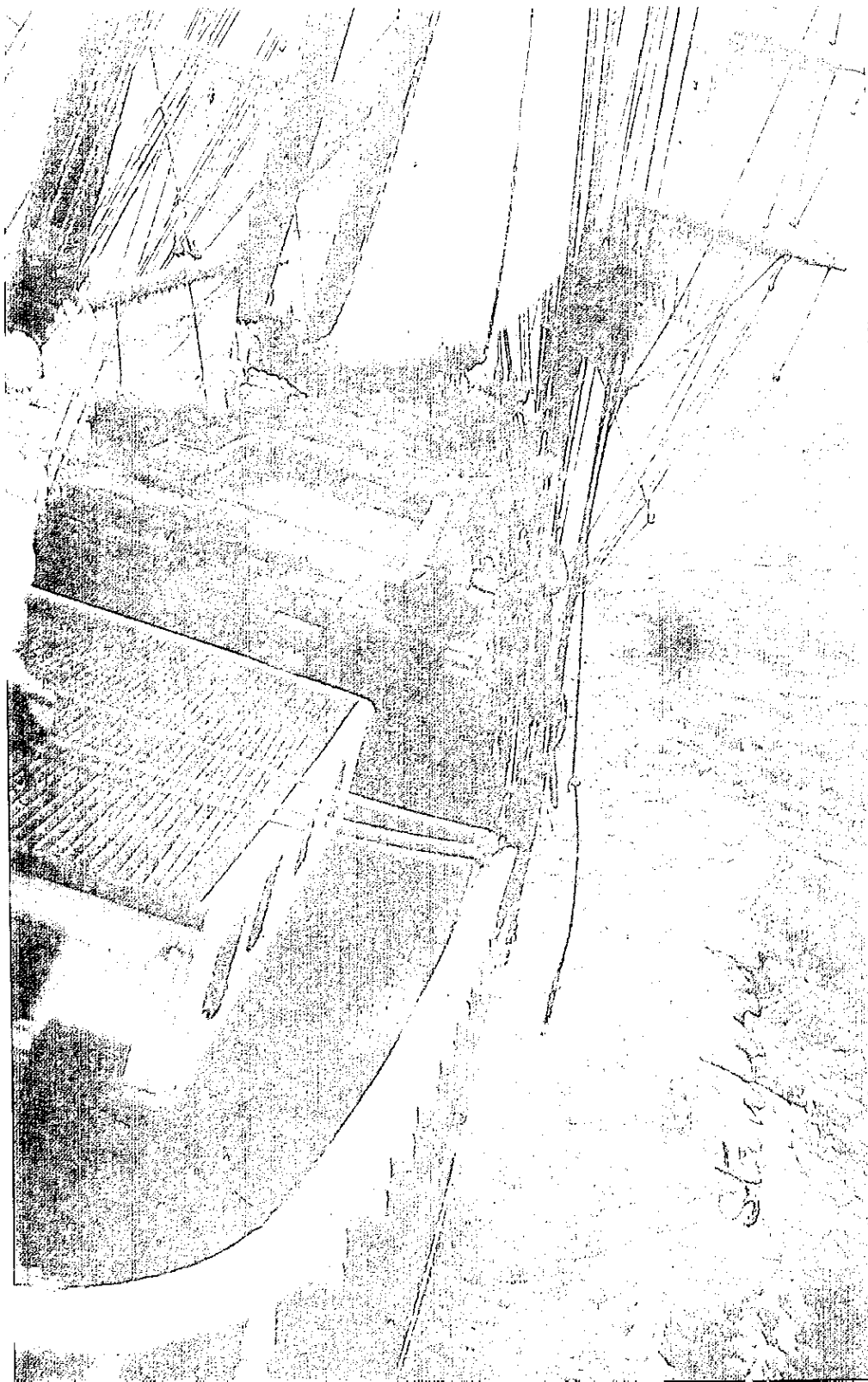


Figure 5.31. *Jane I. Stanford* at sea with a deck load of lumber. Photo courtesy of San Francisco Maritime NHP.

10 1-pound charges to "pierce tanks aboard." A charge also "blew out section on exhaust side of throttle valve chest on anchor windlass engine. Found chest badly deteriorated." On September 15, the crew ran a firing cable from the *Tamaroa* to the beached wreck, about 1,000 feet away. Two mines were first detonated in the after hold, starboard side, blasting the keel and part of the hull. Additional charges placed beneath the after cabin blew out the stern and rudder post. Two more mines in the after hold, stern side, "severed the stern which commenced drifting toward the beach." At noon, work stopped because of weather and did not resume until September 17, when six additional mines, exploded sequentially amidships, beneath the forward deckhouse, and in the forecastle, completed the first round of demolition. The log noted that "all wreckage drifted up on the beach." On September 18, inspection "showed considerably more damage than could be ascertained yesterday. . . . Her midships section separated from the fore part, both parts well on the beach and completely destroyed."

On September 19, 10 more mines arrived on board the *Tahoe*. Nine of these were exploded, "demolishing fore and midships sections." Five additional charges were fired the next day "to complete destruction, parts of wreck now high on beach and do not constitute a menace to navigation." All together, "twenty-six naval wrecking mines, twenty-four detonators, four blasting caps and other miscellaneous gear incident to discharging mines" were employed to demolish the *Jane L Stanford* (Final Report, Commanding Officer to Commandant).

Nonetheless, while proceeding to San Pedro that same day, September 20, Captain John Hansen of the *Captain A F Lucas*, a Standard Oil tanker, reported partly

submerged wreckage from the *Jane L Stanford* at latitude 34° 15' N, longitude 119° 56' W, a mid-channel position nearly 16 nautical miles from Skunk Point (LAT, September 21, 1929). The *Tamaroa* received word that a piece of the *Jane L Stanford* 40 feet long and protruding 3 feet above the water had been sighted. This was thought to be a piece of the upper part of the starboard quarter, which must have drifted away during the stormy night of the fifteenth. The *Tamaroa* immediately searched the channel for two days, but the wreckage was not found (Trip Report, Commanding Officer to Commandant).

After experiencing a collision and "sixteen [sic] TNT bombs" (LAT, September 27, 1929), the *Jane L Stanford* came to rest in the sands of Skunk Point, where fragments remain for study today. The location of the 40-foot remnant is unknown. The vessel fragments were widely distributed by the explosion at the outset, in addition to whatever scattering has occurred since as a result of waves and current. Heavy material from the *Jane L Stanford*—the "huge boiler," the anchor windlass engine, and other gear—must rest on the sea bottom or within the beach hard by the demolition site.

Archeological Record

Material attributed to the *Jane L Stanford* occurs at three localities on the north shore of Skunk Point, Santa Rosa Island. The westernmost wreckage is a piece of hull with five knees protruding from the sand (Figure 5.32). These are connected by members buried beneath the sand. Fastenings are iron bolts, peened over rings, with a diameter of 1¼ inches. The knees are Douglas fir and have naturally curving wood grain selected for optimal support and strength.

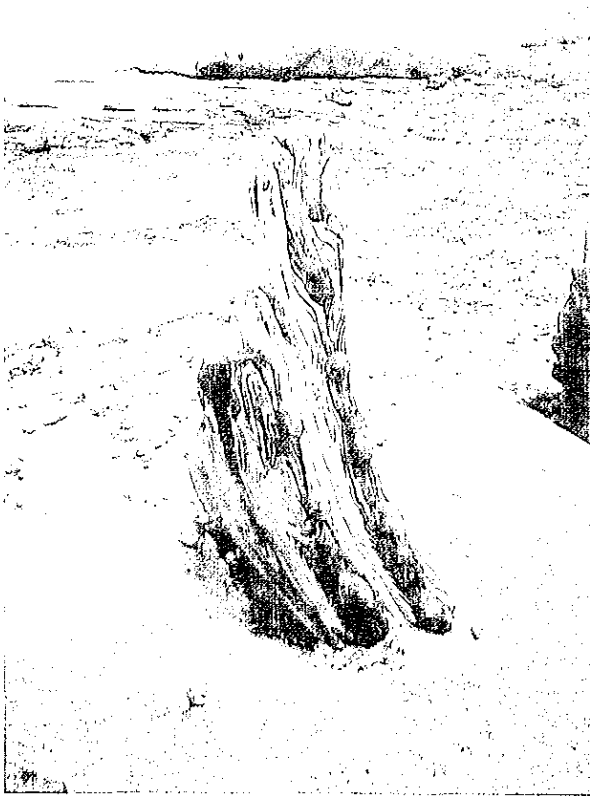


Figure 5.32. This knee is attached below the surface to a section of the hull thirty inches thick. NPS photo by Don Morris.

About 1.25 kilometers to the east, a portion of the keelson nearly 80 feet long looms conspicuously on the beach. Still farther east is a somewhat smaller piece of wreckage. Much of this material is buried in sand, rarely exposed.

Stout iron bolts are prominent in the keelson piece. Although corrosion renders precise measurement difficult, measurements of relatively fresh holes in the Douglas fir timbers indicate that 1¼-inch ferrous bolts, peened over ferrous washers, were employed. These are spaced in two staggered rows set in two 16x16-inch Douglas fir timbers and reaching down into a third, similarly sized

timber, badly rotted, which is obscured by the sand. The irregular intervals between the bolts vary from 13 to 19 inches. In several places, the timbers are missing and only the bolts project from the sand. The bolts form a straight line, indicating that they are still set in the lowest member, except in one area toward the eastern end of the piece where the bolts are skewed to the south. No mast steps are evident in the exposed material, yet it is clear from photographs of the vessel that any portion of a keelson of this length must contain at least one mast step. Perhaps the mast steps were removed when the ship was converted to a fishing barge.

No scarfs were present in the timbers exposed in 1990. A portion of one frame is exposed in the sand north of the keelson at a distance of 14 feet from the member; it is attached to the keelson. There is no hint of either stem or stern members in the material presently exposed.

Small, scattered timbers that can be found all over the general area may be part of the *Jane I. Stanford*. Timbers with ferrous fastenings, including bolts clinched over rings, have been observed over a mile south of Skunk Point. This entire area is characterized by shifting sands, and new material will be exposed periodically (Figure 5.33).

The account of the removal of the *Jane I. Stanford* contains several archeological implications. Presumably, large metal pieces such as the "huge boiler" and its associated machinery should be located just offshore from Skunk Point at the spot where the explosives were detonated. In addition, material might be found at considerable elevation on the low hills just back from the beach in this locality.

The arrangement of the visible remains on the beach at Skunk Point strongly

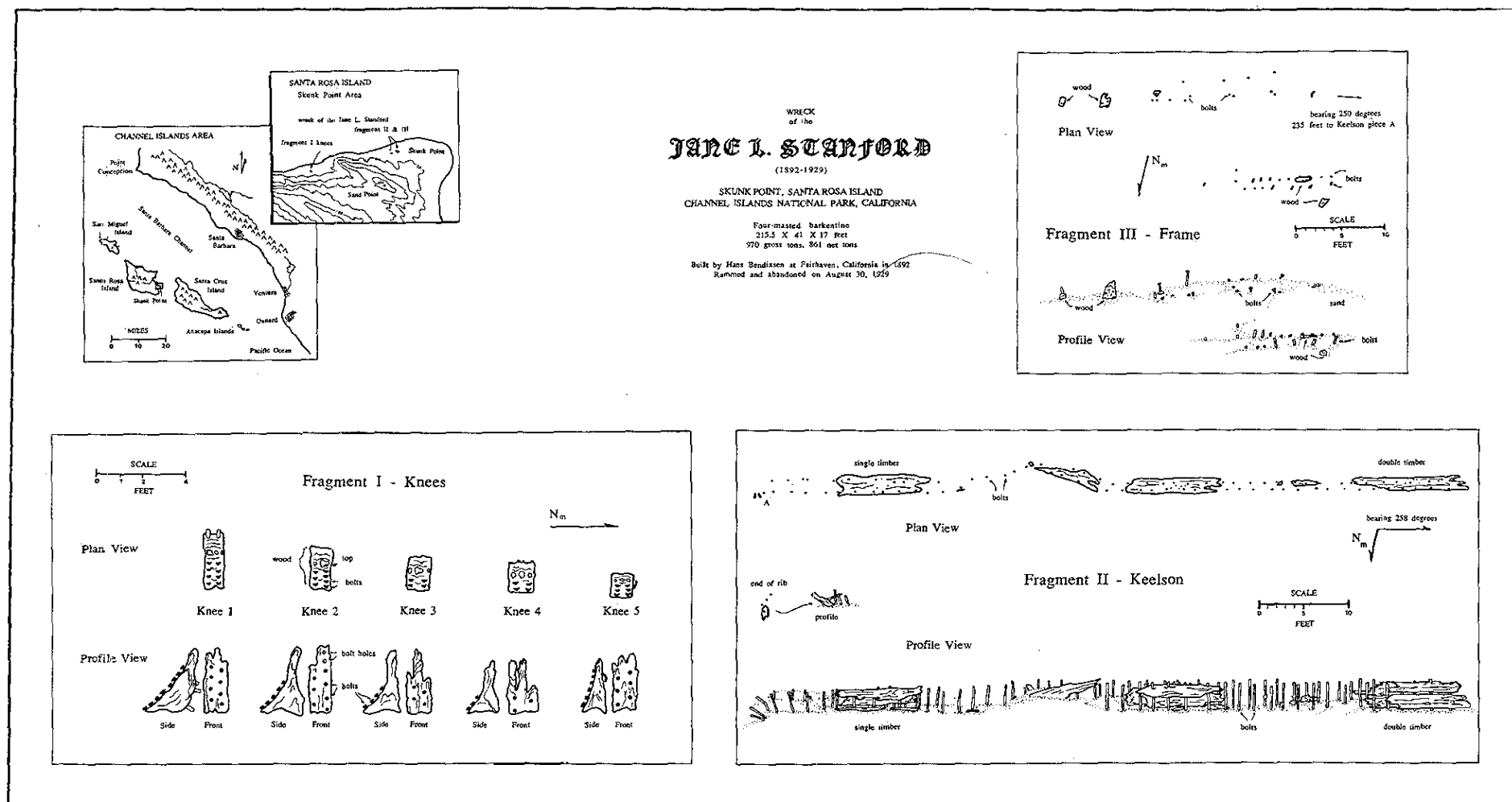


Figure 5.33. Map of the exposed wreckage of the *Jane L. Stanford*. Surveyed by Don Morris, 1989, and drafted by Carol Vesely, 1990.

suggests that a great deal of material is concealed beneath the beach sands. Study of this material should add to the knowledge of construction techniques employed by Hans Bendixsen, one of the most prominent Pacific coast builders. In November 1990, volunteers from the San Augustin Institute began a study of the fragments of the *Jane L Stanford* and uncovered additional wreckage. The section of hull side uncovered is more than 30 inches thick at the level of the main deck knees. A metal detector suggests that a piece of hull 50 feet long remains buried. The keelson assembly consists of nine timbers, each 16 inches square. The material described here is but the tip of the iceberg. Additional work is necessary in order to fully document the fragments of the *Jane L Stanford*.

George E Billings
1903-1941

Five-masted Lumber Schooner-fishing Barge

Gross Tonnage	1260 tons
Net Tons	1103 tons
Length	224 feet
Beam	42.4 feet
Depth	18.3 feet
Decks	one
Official Number	86665
Construction	wood

Historical Record

This was the last vessel built by Hall Brothers, and the largest lumber schooner lost in the park (Table 5.1). By 1930, the vessel was used as a fishing barge at Santa Monica. Changes in safety regulations, actually aimed at eliminating gambling ships, forced the owners to tow the *Billings* to "a lonely island reef north of here (Santa

Monica)" where the vessel was burned in early February 1941.

A photograph of the burning vessel should allow pinpointing the location and discovery of any wreckage that might remain. The wreck has not yet been found, although it is probably near Anacapa Island.

Except for the *Jane L Stanford* and the *George E Billings*, all these vessels wrecked while sailing during long periods of fog and storm. The *G W Prescott*, the *J M Colman*, and the *Watson A West* all wrecked at Point Bennett, while the *Comet* struck on Wilson Rock and drifted onto the beach at Simonton Cove—all on San Miguel Island. Only the *Dora Bluhm* sailed as far east as the south coast of Santa Rosa Island before wrecking. An article in the *Los Angeles Times*, written at the time of the demise of the *J M Colman*, vividly illustrates the hazards these ships faced in running the islands' obstacle course as they voyaged to deliver cargo in San Pedro.

The schooner *Comet*, the sister craft of the *Coleman*, which left this port the middle of the week, got into a heavy fog on Friday, and with no wind to fill her sails, drifted in between Santa Cruz Island and Santa Rosa Island. For several hours she was at the mercy of the waves, and when the fog lifted, she was nearly on the shore of Santa Cruz. A light breeze sprung up just in time to enable the schooner to run in between some dangerous rocks between the islands to the deep waters outside.

When the fog lifted on Friday from the west coast of San Miguel a large square masted vessel, heavily loaded with lumber, was drifting into the

rocks where the *Coleman* lay. She was already inside of the dangerous Richardson rock, and would soon have been where the *Coleman* was if the fog had not lifted, and a breeze come to her rescue. She was sound bound [*sic*], and managed to get out between the rocks and into her course again without accident. The name of this vessel was not learned. This is considered one of the most dangerous parts of the Pacific coast and the need of a government lighthouse is declared imperative [LAT, September 10, 1905].

Not only could fog and storms present hazards but the lack of wind also could leave boats unmanageable in the grip of whatever current might be running. The common wrecking of lumber schooners, both in the Channel Islands and elsewhere along the California coast, vividly illustrates Basil Greenhill's assertion (1980:28) that the fast wooden sailing ship was the "most hazardous vehicle ever regularly used by man."

The *J M Colman*, the *Comet*, and the *Dora Bluhm*, all of which wrecked within 6 years of one another (1905-1911) were built by the same builder, Hall Brothers, within a 5-year period (1883-1888). Their wreck scatters

offer an opportunity for comparative study of the construction techniques used in these vessels. Because the wreck scatters of the *J M Colman* and the *Dora Bluhm* are not well documented, such studies would also strengthen the identifications advanced here. Matthew Russell is currently conducting this work.

While the losses of the cargoes of these vessels represented financial losses to the vessel owners and consignees, they represented a bonanza for ranch operators on the islands. The construction of the Lester ranch house on San Miguel Island resulted from impromptu lumber deliveries before 1911 (Roberts 1978:113). Roberts's description of "a crude house built partially from railroad ties" suggests that the 1879 cargo of the *G W Prescott* was utilized as well. Certainly the clear redwood fence posts standing on the island today, some notched and mortised from previous uses, look quite different from the usual mainland fence material. On Santa Rosa Island, oral tradition (ranch foreman Bill Wallace, personal communication) holds that lumber from a schooner, probably the *Dora Bluhm*, went into the earliest fences on the island, which were board fences, not barbed wire.

Table 5.1. Summary of Lumber Schooner Wrecks in Channel Islands National Park

<u>Vessel</u>	<u>Year of Wreck</u>	<u>Masts</u>
<i>G W Prescott</i>	1879	2 masts
<i>J M Colman</i>	1905	3 masts
<i>Dora Bluhm</i>	1910	3 masts
<i>Comet</i>	1911	3 masts
<i>Watson A West</i>	1923	4 masts
<i>Jane L Stanford</i>	1929	4 masts
<i>George E Billings</i>	1941	5 masts

CHAPTER VI

Sealing in the Northern Channel Islands

Today the pinnipeds of the Channel Islands constitute one of the most outstanding features of the park and the sanctuary. At the principal rookery, Point Bennett on San Miguel Island, harbor seals, elephant seals, California sea lions, Stellar sea lions, Northern fur seals, and Guadalupe fur seals all use the spacious sand beaches—the only place in the islands and in the world where these six pinniped species occur together. Fur seals and Stellar sea lions have been noted only around San Miguel, and elephant seals maintain a small rookery on Santa Barbara Island, but harbor seals and California sea lions are found throughout park waters and beaches. This varied population forages in the kelp forests surrounding the islands.

This general situation has apparently been true of the islands for some time, although there have been changes in relative abundance over time. Before 1940, Stellar sea lions were more common than California sea lions, whereas Stellers are nearly gone from the area now. In prehistoric times, roughly around 3000 B.C., the Guadalupe fur seal was the most common pinniped whose bones were deposited in prehistoric middens at Point Bennett (Walker and Snethkamp 1982:123);

today the species is extremely rare, and only one or two individuals are observed in the park each year (Robert deLong, personal communication). Elephant seals have rebounded enormously since the time of their supposed extinction around 1900.

Sealing came into vogue as whale hunting declined because of decimation of the larger animals. On occasion, both types of animals were hunted together. Elephant seals, particularly, gave oil as good as or better than whale oil for many industrial applications, and hides, pelts, testes, and whiskers could also be sold profitably (Scammon 1968).

Although sealing in the park area did involve the use of boats, animals were also taken on land, and island camps were established as bases for hunting. Like many commercial fishing boats, the vessels engaged in the trade were often adapted from other uses, and the crew and skipper were often opportunistic. They made money at whatever came along, not necessarily excluding illegal activities like smuggling.

The following article gives a vivid picture of the sealing trade on Anacapa during the nineteenth century:

SEALING ON ANACAPA

With the month of December usually comes the seal catching season on the islands off the coast. Although seals can be found in small numbers on these islands nearly the entire year, during the winter months they are much more numerous, and are in a better condition, producing more oil and blubber. The business of catching seals and converting their blubber into oil is quite extensively pursued on the islands in the Santa Barbara Channel. A large number of men and boats are employed, and altogether, it is a profitable industry.

On Anacapa, this season, Mr. Myron Warner is devoting his attention to this business. Seals are very numerous, and can be killed within a short distance of his camp. They are killed with rifles, and towed to shore near where the camp is situated, when the blubber is stripped off in great sheets and taken to the trying pots, where it is chopped and tried out. An average size seal will produce about a barrel of oil, which is worth from 35 to 45 cents per gallon, according to its purity.

On Anacapa, where Mr. Warner's camp is situated, there is only a narrow strip of sand beach, while all around are rugged and precipitous cliffs. The camp is on the north side of the island, in a little cove. On the other side of the island no sealing is done, because it is very difficult to kill the animals and get their blubber to camp. On the rocks and beaches thousands may be seen at any time,

baking in the sunshine. The hunter goes along in his boat and selects the largest and fattest, sending the deadly bullet crashing through their brain. Sometimes they are killed in the water around the boats. In killing them in the water, great care must be taken to keep the boat far enough away from them, for one of these old sea lions, in the throes of agony and death, is liable to attack a boat and make kindling wood of it in a moment.

There is not a drop of fresh water on the island, and the fishermen procure their supply from either Santa Cruz Island or the main land. Wood is but little used, but at the commencement of the season the fishermen usually lay in a small supply. The cracklings from the blubber, and some of the blubber itself, furnishes most of the fuel. On Anacapa about five men are employed, and Mr. Warner informs us that the present season he will obtain about one hundred barrels of oil.

The seal are the ordinary hair seal, and the largest of those killed will weigh from 1,800 to 2,500 pounds. Their skins are worthless. Their barking can be heard for miles on a still night, and in the noise on the island it is almost impossible to hear a person speak. The season lasts about two months, when the seal begin to leave the islands for other climes. The business is dangerous and possesses no charms. The fishermen live in voluntary exile two or three months, and during that time never see strangers' faces. Communication

with the outer world is cut off and a newspaper is but rarely seen. These men are liable to have their boats broken up by wounded seals at any time. Their lives are constantly in jeopardy [*Ventura Free Press*, n.d.].

The location of the camp mentioned in the article is clearly Frenchy's Cove, at the junction of Middle and West Anacapa Islands. Although boats were employed, this passage implies that there was nothing very notable or unusual about them.

Sealing took place regularly on Santa Barbara Island for elephant seals and California sea lions (Scammon 1968:116). Sealers also hunted on San Miguel Island, particularly around Point Bennett, where sea otters were prolific (Scammon 1968:169). The hut in which the survivors of the *Cuba* took shelter in 1923 was built for sealing. All that remains of the camp, its trash deposit, has been recorded as an archeological site. Archeological investigations into sealing will require attention to these shore-based stations as well as to the vessels that are discussed in this chapter.

In addition to hunting seals for pelts and fur, there was a small trade in live animals, particularly sea lions. Apparently animals trapped in the northern Channel Islands were better able to withstand captivity than the same species taken in other localities. Animals from the islands were shipped to the East Coast and on to European cities where they sold for profitable sums, according to James Mullett, who specialized in this work. "The only ones [seals] which will stand captivity are those from the Santa Barbara Channel Islands, and the entire stock in the world, in museums, circuses, menageries and zoological gardens have been shipped from this point" (SBMP, May 20, 1891).

The thirty animals captured last week [from San Miguel Island] were shipped yesterday by freight for New York, and Captain Mullett left on the afternoon train to look after his pets. They are all to be sent to Europe, and are already ordered in Christiana, Sweden, Amsterdam, Antwerp, Liverpool, London and Paris [SBMP, May 20, 1891].

The relatively diminutive sealing vessels discussed in this report are some of the earliest wrecks known for the Channel Islands, other than the *Winfield Scott*. None of them has yet been found or studied. Because of their small size, it is understandable that they ran afoul of storms and bad weather as they worked close to treacherous, stormy San Miguel Island.

Leader

1862?-1876

Two-masted Sealing Schooner

Gross Tonnage	9.96 tons
Net Tonnage	---
Length	36.0 feet
Beam	13.5 feet
Depth	3.8 feet
Decks	one
Official Number	15216
Construction	wood

Historical Record

Documentation for this rather small vessel is sparse. Its date of construction is unclear, although the *Leader's* wreck report states that it was 10 years old when wrecked on June 17, 1876. The circumstances and location of its construction are also undocumented.

According to the wreck report, the *Leader* was anchored at San Miguel Island, with both anchors set. The wind was north-northwest and there was no moon. A heavy swell "started mooring went ashore" in the cryptic phrase of Captain Charles Lutgens. According to the *San Francisco Alta California* (August 12, 1876), the wreck occurred on the "weather side" of the island, which under these conditions would be the northwest coast somewhere between Harris Point and Point Bennett, including Simonton Cove and Otter Harbor. There is no safe anchorage on this side of the island under these conditions. The *Alta California* states that a squall blew up and gives the date for the wreck as June 7, but the wreck report signed by Charles Lutgens is more likely to be correct on these points.

The crew of six continued sealing on Flea Island, known today as Castle Rock, having recovered about half the empty casks that comprised the *Leader's* cargo at that point. After four weeks, low on supplies, two of the crew took the small boat salvaged from the wreck and sought help from Santa Rosa Island. Captain Thompson led the rescue effort (Reed 1989).

Wreckage from this vessel is probably strewn over a wide portion of the northwest coast of San Miguel by vigorous surf and currents. The exact location of the wreck is likely to be somewhere between Otter Harbor and Point Bennett, where pinnipeds concentrate today. Surviving fittings, timbers, and fastenings from this vessel would be considerably smaller than those from lumber schooners that came ashore in this area later, the smallest of which measured 91 gross tons. So far, shoreline searches in this area have been negative.

N B

1853-1879

Sealing, Otter Hunting, and Fishing Schooner

Gross Tonnage	17.6 tons
Net Tonnage	---
Length	49 feet
Beam	16.2 feet
Depth	3.6 feet
Decks	one
Official Number	18388
Construction	wood

Historical Record

The *N B* is a vessel with a complicated construction history. Fortunately, many of the registration documents have survived to suggest some fascinating studies that could be carried out when the wreckage is located. When the *N B* was launched in 1853 at San Francisco, the vessel was a sloop with one mast, measuring "22 13/95 tons," according to its certificate of enrollment, and with a square stern and a gilt head. In 1859, the rig changed to that of a schooner, which must have involved adding a mast and perhaps resteping the original mast. Minor changes in official dimensions seem to be a result of measurement variance rather than of reconstruction; no rebuilding is noted on the *N B's* licenses. The data from the *N B's* 1879 certificate of enrollment are entered above.

During most of its career, the *N B's* home port was San Francisco. The vessel's final registration was San Diego. The *N B* stranded on San Miguel Island on December 23, 1879. A brisk northeast wind intensified during the night and rising seas swept over the decks until the *N B* was "tossed up on the beach like a toy, with which the waters had become tired

of playing." The *N B* must have been anchored somewhere on the northeast side of San Miguel Island to have been driven ashore by a northeast wind. This account strongly implies that the vessel wrecked in Cuyler Harbor. If the vessel occupied the normal anchorage, its remains should lie considerably west of most of the other vessels that have stranded in this anchorage.

Rogers Brothers had sold the *N B* to "Ledbetter and Jackman" a few weeks prior to the wreck, although the final license of November 8, 1879 listed A. C. and H. A. Rogers as each owning one-sixth of the *N B*. James Ledbetter of Santa Barbara owned "3/6" on this license.

Surprise
1870s-1881
Sealing Schooner

Gross Tonnage	14.65 tons
Net Tonnage	---
Length	39.8 feet
Beam	12.2 feet
Depth	5.0 feet
Decks	one
Official Number	115499
Construction	wood

Historical Record

Little is known about the *Surprise*. In addition to sealing, the vessel also carried crews of Chinese-American abalone fishermen to the islands. The day of March 13, 1881, when the ship wrecked, was very windy (SBDP, March 16, 1881).

The schooner *Surprise* was anchored at San Miguel Island on the 13th inst. and during the windstorm parted both cables and went ashore. The Captain, Charles Brown, together with John Haskell and Ramon Mesa, and Mr. Muller [Mullett??] who had the vessel chartered, arrived here last night and gave the particulars. The vessel is now lying high and dry, and it is yet uncertain whether she can be got off, or whether she is a total loss. The schooner belongs to Rogers Bros. & Co. of this city [SBDP, March 22, 1881].

Rogers Brothers, who engaged in the sealing trade, among other things, had sold their interest in *N B* just before she wrecked in December 1879; otherwise, the *Surprise* would have been their second vessel loss in less than 15 months.

The firm of Rogers Bros and Co. deserves great credit for having established such a large and important business. As general merchants, they have won a prominent position among the firms of Southern California. Their stock is full and complete, and comprises everything in the line of groceries, provisions, glassware, etc. They do an immense business in the way of buying and selling country produce. The farming community, as well as all heads of families, are especially requested to read their new advertisement [SBDP, March 22, 1881].

Convoy
?-1884
Sealing and Otter Boat

Gross Tonnage	15.26 tons
Net Tonnage	14.7 tons
Length	43.5 feet
Beam	14.6 feet
Depth	4.5 feet
Decks	one
Official Number	5161
Construction	wood

Historical Record

The Santa Barbara papers reported extensively on a strong storm that hit the region at the end of January 1884. Finally, this story appeared:

The schooner *Convoy*, Captain Ellis, was lost in the recent storm. On Sunday, Jan 27th, she broke her rudder and became unmanageable. The Captain and crew came home in an otter boat, from the island of San Miguel, arriving here this morning. The schooner was of sixteen tons burden, of the value of two thousand dollars, belonged to Rogers Bros. of this city, and was not insured.

She had been engaged in otter hunting off the Santa Barbara chain of islands. . . . In pitching from crest to trough she became disabled and the schooner was at the mercy of the sea.

The wreck report states that the vessel came ashore on the "N.W. point of Santa Rosa Island" as a consequence of a broken rudder and cables during a southeast gale. Captain

Higgins of the *Star of Freedom* returned the crew to Santa Barbara. The *Convoy* is considered a sealer, although the newspaper labeled it an "otter hunter"; presumably the crew would have taken any fur bearer they encountered. Note that Rogers Brothers suffered yet another vessel loss.

Isabella
?-1885
Sealing and Fishing

Gross Tonnage	12.80 tons
Net Tonnage	12.16 tons
Length	35.4 feet
Beam	15.0 feet
Depth	4.4 feet
Decks	one
Official Number	100181
Construction	wood

Historical Record

Word comes to the mainland that the sealing sloop *Elsie Wencher*, of San Diego, has been wrecked upon the rocky shore of San Miguel Island. The accident happened about two weeks ago, and the vessel is said to be a total loss, but other than this no particulars are known. The wrecked boat is said by some to be the *Isabella*, but this report is not believed by sea-faring men [SBDP, December 9, 1885].

In fact, the vessel wrecked was the *Isabella*, according to the official wreck report filed in July 1886. The *Isabella* wrecked in Cuyler Harbor, San Miguel Island, in a strong east-southeast wind accompanied by rain, darkness, and heavy seas. The vessel struck

rocks 10 minutes after the anchor cable parted. The wind direction given in the wreck report indicates that the vessel stranded on the western shore of Cuyler Harbor, perhaps even northwest of the normal anchorage. If this is so, the remains of the *Isabella* may lie beneath the debris of the 1895 or 1942 landslide in Cuyler Harbor.

Pearl
?-1891
Sealing Sloop

Gross Tonnage	---
Net Tonnage	---
Length	33 feet
Beam	---
Depth	---
Decks	one
Official Number	---
Construction	wood

Historical Record

The *Pearl* wrecked on Anacapa Island in a windstorm while Captain Troop and his two clients, an Austrian husband and wife, were camped ashore. Having been left without provisions, they were forced to kill a sheep for food. Two days later, the steam schooner *Santa Barbara* brought another group of sealers to the island. The Austrians stayed on with other sealers, and Captain Troop returned to Santa Barbara (*Santa Barbara Daily Independent*, September 25, 1891; SBMP, September 26, 1891; *Ventura Free Press*, October 2, 1891).

The description of the wreck suggests that the incident occurred at Frenchy's Cove, virtually the only anchorage that would allow reasonable access to a camping spot above the tides. A vessel anchored there is vulnerable to

both northwesterly winds and Santa Anas. No material has been located that has been identified as belonging to this wreck.

Kate and Anna
1879-1902
Sealing Schooner

Gross Tonnage	24.65 tons
Net Tonnage	23.42 tons
Length	36.4 feet
Beam	14.8 feet
Depth	5.7 feet
Decks	one
Official Number	14376
Construction	wood

Historical Record

The dimensions given above are those on the *Kate and Anna*'s certificate of enrollment at the time it wrecked in Cuyler Harbor, San Miguel Island. Fortunately, registration documents have been preserved in the National Archives; they show that the vessel was essentially three different vessels during its lifetime.

Charles Lutgens, who was also the captain, built the *Kate and Anna* I at Yaquina Bay, Oregon, in 1879. According to the first certificate of enrollment, the vessel was a steam schooner 45 feet long with a 14.5-foot beam and a depth of 5.9 feet. Measuring 22.57 gross tons, the *Kate and Anna* had a billet head and a square stern.

The *Kate and Anna*'s next certificate of enrollment, dated February 11, 1882, states that she was rebuilt by master carpenter John F. Steffen and was now a steam screw steamer with a sharp head and an elliptic stern. The *Kate and Anna* II had grown to a length of 56.4 feet, a beam of 14.8 feet, and a depth of

5.7 feet. Gross tonnage was now 30.70 tons. Lutgens was still master and part owner. Certificates of enrollment issued during the 1880s give a net tonnage of 16.49.

The *Kate and Anna* III's certificate of enrollment of October 16, 1889, states that the previous certificate of enrollment was surrendered and "vessel changed from steam to sail" as the vessel achieved its final dimensions, with a sharp head and an elliptic stern. Lutgens remained as master.

Throughout this period, the ship was licensed for fishing and the "coasting trade," in which enterprises it seems to have acquired an unsavory reputation for smuggling Chinese immigrants and opium. Although the ship was watched, no evidence was ever obtained (Haller 1986). The *Kate and Anna* was on a sealing trip to San Miguel Island when the end came.

The sealing schooner *Kate and Annie* was wrecked in Cuyler's Harbor on San Miguel island, the 9th instant. The schooner had put into the harbor to get out of a bad northwest blow. The anchor chain parted, the vessel was driven onto the beach. Captain Lutgens and the crew, six men all told, reached shore in safety by swimming through the breakers, but lost everything. The *Kate and Annie* filled with sand and was going to pieces when the schooner *Restless* sailed yesterday. She was a 30 ton boat, home port San Francisco, Lutgens owner. Her loss is over \$3000. The *Kate and Annie* was one of the best known boats in southern waters and had an interesting history [LAT, April 17, 1902].

The date and location of the wreck are confirmed by a notation on the final certificate of enrollment.

It is not absolutely clear whether Charles Lutgens, captain of the *Kate and Anna*, is the same person who wrecked the *Leader* in 1876. If so, he would be the only person known to have wrecked two vessels in park waters.

Ella G
1899-1908
Sealing Schooner

Gross Tonnage	25 tons
Net Tonnage	16.17 tons
Length	49.4 feet
Beam	13.6 feet
Depth	7.4 feet
Decks	one
Official Number	116928
Construction	wood

Historical Record

A wreck report from the National Archives notes that the *Ella G* wrecked in Becher's Bay, Santa Rosa Island, at 5:45 A.M. on February 2, 1908. The *Ella G* was an American-built wooden schooner of British registry, engaged in sealing. Its home port was Victoria, British Columbia, where the vessel departed in November 1907, on a sealing voyage. After obtaining 42 seal skins at the Farallon Islands, the crew encountered storms that severely damaged the ship's rudder. The *Ella G* ran before the wind for the lee of Santa Rosa Island, arriving there on January 31.

There the vessel encountered a severe southeaster that turned a normally secure anchorage into a threatening lee shore. The

Ella G stranded in Becher's Bay "one half mile west of wharf" in gales blowing about 40 miles an hour. Although both anchors were set, the anchor lines were severed, the rudder was lost, and the vessel became unmanageable. The vessel and its entire cargo of sealskins, valued at \$1,050, were lost as the crew used the ship's boats to escape the breakers. The *Ella G* rode up onto the beach, breaking up almost immediately.

After landing at the mouth of the creek that leads to the ranch, the crew again went to the scene of the wreck at low tide, only to find little left but the keel and a few ribs. Wreckage was scattered all over the base of the cliff and bones of their ship were buried in the sand. The men procured shovels and dug into the sand. At a depth of some six feet, they found some of their ship's stores, such as canned goods and several oil skins. Not a thing could they save. Besides the ship, they lost a small boat, half a dozen fine sealing rifles, ammunition, and all the equipment for navigation and personal effects.

Assisted by the ranchers on Santa Rosa Island and later by those on Santa Cruz Island, the crew arrived in Santa Barbara on February 13, 1908. This storm, with heavy rainfall, also caused considerable damage to "crayfish" (lobster) camps on Santa Cruz Island [LAT, February 4, 1908].

Archeological Record

The information available for the *Ella G* indicates that wreckage might be expected in the area between the pier and Carrington Point in the northern portion of Becher's Bay. During the *Fairweather* cruise in 1985, launches investigated this locality using both side-scan sonar and magnetometer. Later analysis of the side-scan sonar data indicated a pole like object on the seabed that showed up on the magnetometer launch Fathometer. This sonar trace appeared to correlate with a magnetic anomaly, although the anomaly was not consistently repeatable on successive sweeps through the area. The side-scan record showed nothing else that could be interpreted as cultural in origin.

Investigations continued from NPS vessels later that same year. The NPS magnetometer made successive sweeps on 20-meter intervals through the original area again. Only very small anomalies appeared—perturbations interpretable as anchors, lobster traps, or similar small items. A dive team investigated the largest of these with negative results.

Wooden frames from a relatively small vessel were seen in the early 1980s very near the pier at Becher's Bay (Figure 6.1). This material is periodically uncovered when winter storms move sand off the beach. In 1992, some observations of the partially exposed portions of this wreckage showed frames spaced 12 to 13.5 inches apart. Individual frames were sided 2¾ inches and molded 5¾ to 6 inches. About 17 feet of the hull were present in this one piece. Nearby were a

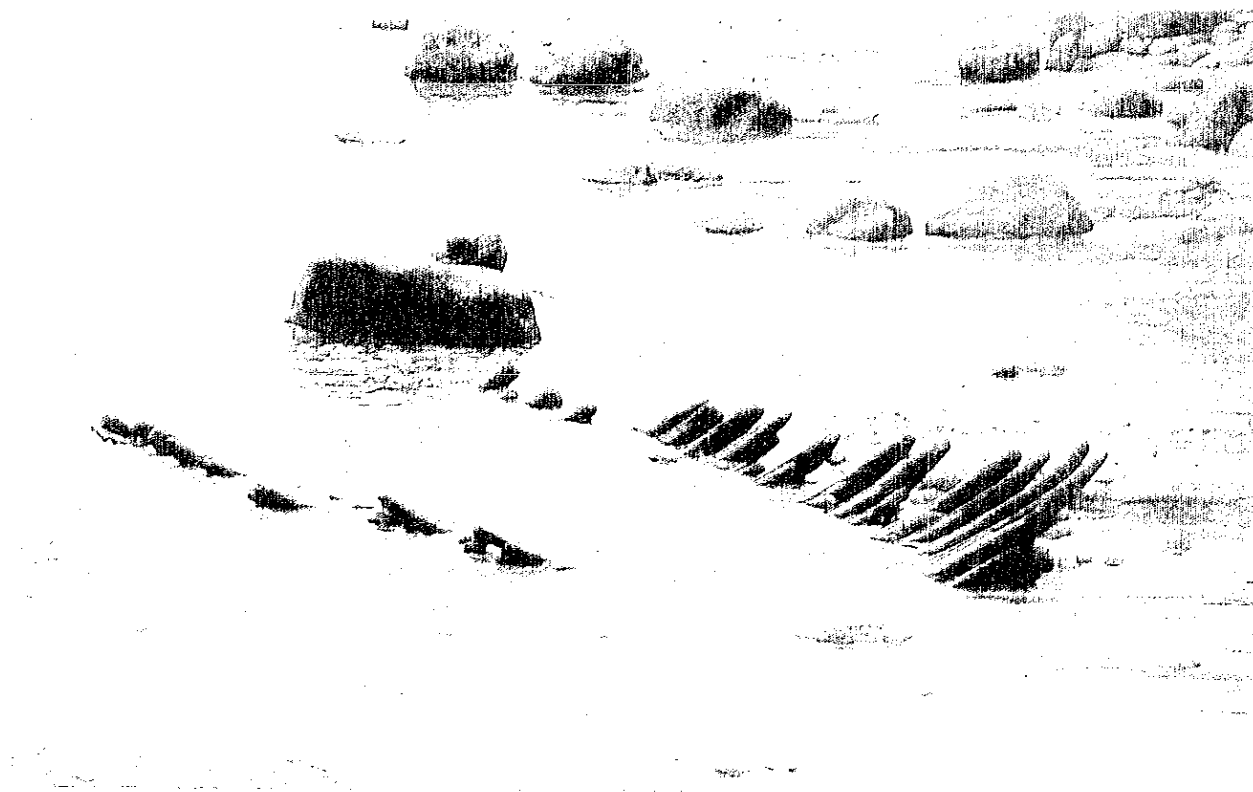


Figure 6.1. A hull section partially exposed near the pier, Becher's Bay, Santa Rosa Island, in the general area where the *Ella G* wrecked. NPS photo by Don Morris.

chainplate, a centrifugal pump fashioned of ferrous metal, and a $\frac{5}{8}$ -inch drift. Directly beneath the pier's first set of wood pilings was another hull fragment comprising four frames and a stuffing box for a 3-inch diameter shaft. The ferrous drive shaft exhibited heavy wear.

Systematic search of the beach to the north toward Carrington Point has yet to reveal any additional material. Although the material described here is in a plausible location for wreckage of the *Ella G*, the presence of the drive shaft does not accord with current knowledge of the vessel's equipment.

CHAPTER VII

Vessels of the Fishing Industry

Fishing has a long history in the islands, beginning in prehistory with the Chumash, whose later middens offer particularly abundant evidence for diverse and sophisticated practices that brought pelagic as well as near-shore species to the table. In historic times, commercial fishing fleets harbored in Santa Barbara and San Pedro dominated island operations. The development of a commercial fishing industry in Los Angeles accelerated with the establishment of sardine canneries just before 1900 and the development of canning techniques and marketing of albacore tuna beginning in 1903 (Queenan 1983:59). Canneries were illegal in Santa Barbara after 1924, so the smaller fleet based there sold its catch to Monterey concerns. It is clear that vessels from other ports along the Pacific coast also operated around the islands from time to time.

The first sardine cannery in San Pedro opened in 1894. The *Alpha*, a 22-ton sloop with an auxiliary gas engine, caught sardines using purse seines—a larger size for mackerel and a smaller one for sardines. In later years, the vessel also netted whitefish: barracuda, white sea bass, and yellowtail tuna. Through

the turn of the century, the fishing fleet consisted of only three to four vessels. Additional boats came into the fleet beginning in 1914 (Scofield 1951:27).

The Van Camp Sea Food Company opted for high-volume tuna production, developing its first tuna fleet of 15 40-foot boats in 1915. By 1916, purse seining for yellowfin and blue fin tuna appeared in Los Angeles, and it had become common by 1920. Los Angeles became the premier center for commercial fishing because of the abundant sardine, mackerel, and albacore in its waters and because of dependable transportation links, primarily railroads, with markets elsewhere in the country (Queenan 1983:59). San Pedro was home port to about 125 purse seiners (Figure 7.1 and 7.2) in 1920, although the economic recession after the war cut the size of the fleet in half (Scofield 1951:28).

In 1921, according to Scofield (1951:35), about one-quarter of the sardine fleet consisted of fishing boats about 35 feet long, each with a crew of seven to eight. These boats were primarily manned by Italian-Americans. The remainder of the fleet were newer Japanese-American boats 45 to 50 feet long. The net in use was a lampara, a simpler and lighter

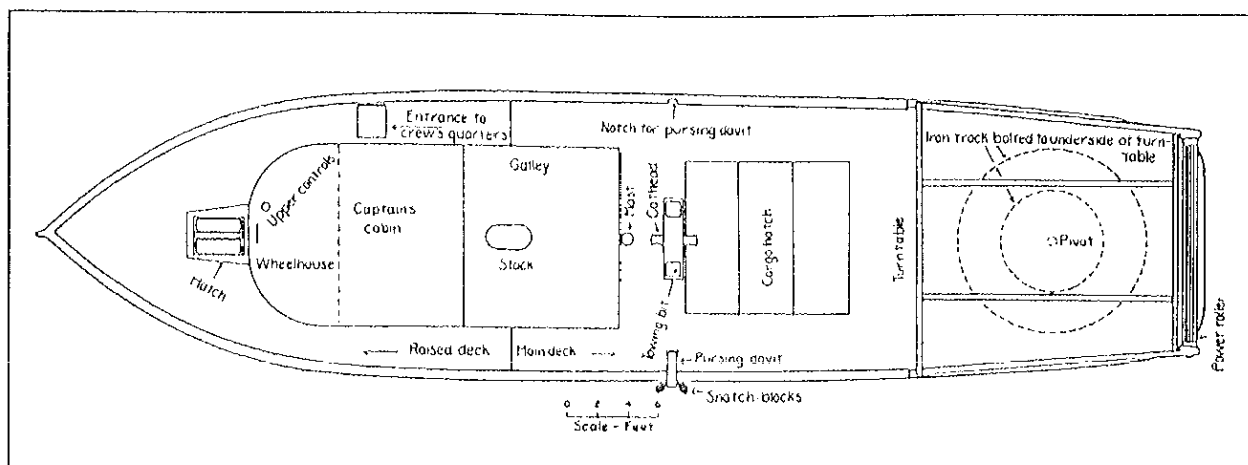


Figure 7.1. Deck plan of a purse seiner. By S. S. Whitehead, 1931.

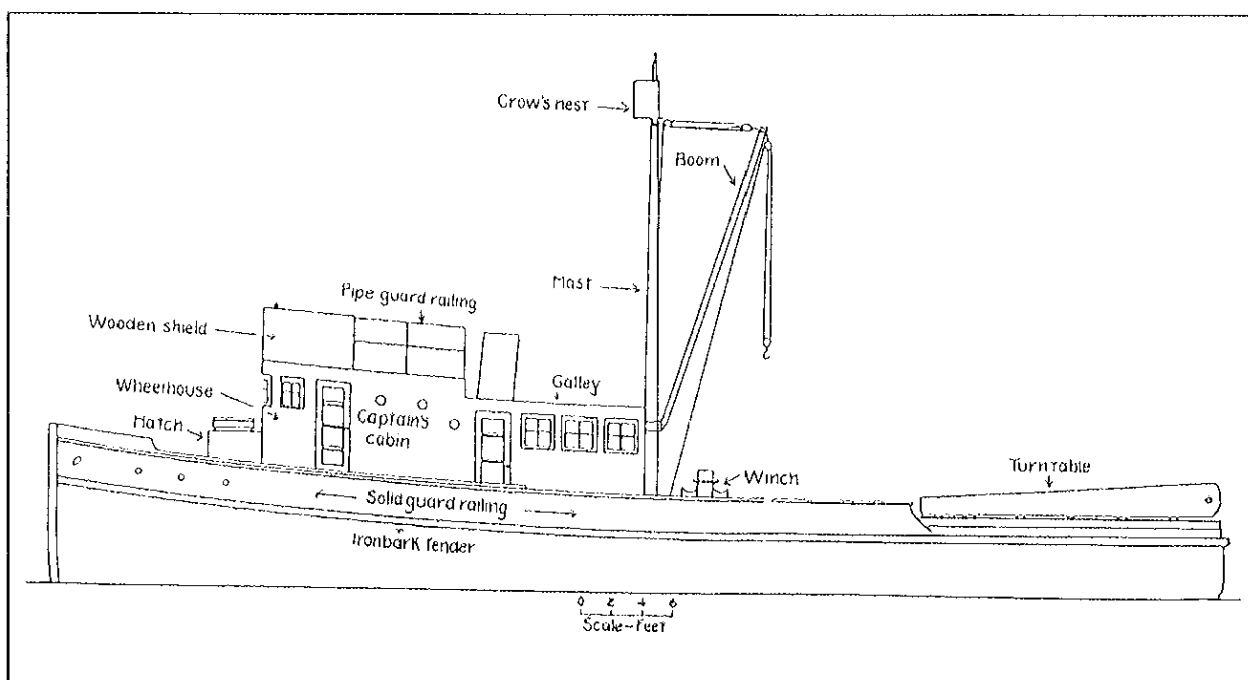


Figure 7.2. Generalized sketch of a purse seiner (after Scovill, 1951).

roundhaul net that could be handled more effectively than early purse seines by a smaller crew (Scofield 1951:10, 28). This type of net had been introduced to the area about 1905, and it reigned supreme in sardine fishing from 1915 to 1925, when improved purse seines became more popular (Scofield 1951:30).

The typical purse seiner was about 65 feet long, with a high bluff bow, a pronounced sheer, an open afterdeck with a turntable for handling the nets and a cargo hold, and a prominent wheelhouse containing galley and quarters for the captain and crew. Through the 1930s and 1940s there was a tendency toward the production of ever larger purse seiners, culminating in 1948 in the *Santa Helena*, an all-steel vessel over 135 feet long, costing \$500,000. Although larger vessels offered attractive returns when catches were large, greater losses were also possible when harvests fell off (Scofield 1951:41).

Harvests of sardines, especially, have been highly variable in coastal California in the past. Discussions of sardine fishing in California waters invariably speculate about the possible causes of the disappearance of the sardine and implicate natural factors as well as the possibility of overfishing. Of great interest for this issue would be studies comparing the presence of fish populations in prehistoric middens with their occurrence and fluctuations in recorded history. Were sardines consistently available before European fishing began?

In Santa Barbara, commercial fishing began with fresh fish, abalone, and lobster, starting with near-shore operations from small boats. Fishing developed as Italian-Americans from the San Francisco area developed the market fish potential of the area after the gold-

rush era (Payne 1982:117). Andre Larco, who developed a company long dominant in the Santa Barbara area, sold his catch daily door to door beginning in 1876 (Kahn 1982:99). His concern, along with the fish processing of the Castagnola family, dominated commercial fishing in the area throughout the Great Depression years. Over time, fishing expanded to the Channel Islands, and larger boats, often constructed locally, came into service.

After the Civil War, Chinese immigrants developed the abalone fishery, which had expanded to the Channel Islands by the 1880s. Rogers Brothers, prominent in the sealing trade, also used the schooner *Surprise* to transport Chinese-American crews to shore camps on the islands (Payne 1982:118). A recent archeological survey on Santa Rosa Island has located several of these camps. Originally sought for meat that was dried and exported to China, the abalone eventually became more valuable for its shell than for its flesh. By 1900, Japanese-Americans entered the trade as ordinances prohibiting shallow-water harvesting drove the Chinese out. Anglo-American divers entered the industry during the 1930s, and the internment of Japanese residents during World War II left Anglos in control of what became a declining fishery after the 1970s.

The individual wreck accounts that follow, again presented chronologically by time of accident, show vividly how vessels that were harvesting the resources of the ocean around the islands got into trouble in very different ways from those of the larger vessels that passed near the islands. Not surprisingly, far more sailors died in the wrecks of these smaller vessels.

Chinese Junk
? 1884
Fishing, Sealing Vessel

Gross Tonnage	35 (approx)
Net Tonnage	--
Length	----
Beam	---
Depth	---
Decks	---
Official Number	---
Construction	wood

Historical Record

In an article on Chinese fishing and junk operations, we learn "It has not been quite a year that a junk in the vicinity of Anacapa Island was allowed to run a reef and sunk, the party being rescued by the sloop *Ocean King*...." (SBDI, June 5, 1885).

This event was more fully reported in the same paper on July 31, 1884:

Miraculous Escape

A Chinese Junk Founders on a Reef
Near San Nicholas

We learn from Capt. Libby, who arrived in the harbor this morning with his sloop, the *Ocean King*, with several tons of abalone shells, the miraculous escape of the crew of a Chinese junk that left San Diego a few days ago for the purpose of securing a cargo of abalone shells for the San Francisco market. While lying at anchor on the evening of the 25th inst., a westerly gale sprang up, and notwithstanding the fact that the vessel had two anchors out she drifted upon a

reef that at high tide is not noticeable. On board all was still up to the time she struck the rocks, and her pounding of course woke the occupants. That the vessel was a total loss was fully realized by the men when they saw the water rushing into her with fearful velocity. They had drifted five miles from where they had originally anchored and their chances of reaching the shore alive had about been despaired of. Fortunately, however, for the crew, Capt. Libby, who had been aroused by the noise of the boat in going over the reef, being lifted and lowered by the action of the swells of the ocean, hove in sight and rescued the men from their perilous position and landed them safely in Santa Barbara. The crew consisted of eight men, and the only thing that was saved was a bag of rice and a coil of rope. The boat was of about 35-tons register and uninsured. From the description of the boat, it is supposed to be the one that was launched in this city some two years ago by the Chinamen, as she was constructed for the purpose of fishing, hunting and gathering shells in and around the different islands that lie in the channel. The Master of the *Ocean King* deserves credit for his heroic bravery in rescuing the party, as they had abandoned all hopes of ever being rescued.

On the basis of the present information, it is difficult to say whether this incident occurred at Anacapa or San Nicholas Island. No wreckage attributed to a Chinese junk is reported from either island. Chinese builders of junks in California primarily employed

redwood and assembled the craft with fastening techniques quite different from conventional wooden construction. Therefore, even small fragments should be identifiable. Dr. Robert Nash describes the vessels:

The junks built in California used the native redwood... The construction details are typically Chinese... The hull was carvel built with two inch redwood planking edge nailed on six inch centers. Black iron cut nails were used... The keel was Oregon pine [Douglas fir, ed.]. They had considerable sheer, a raking stern and flaring bow. The stern was narrow and dory-like with an overhanging deck like most Oriental junks. The rudders were of the unbalanced type with diamond shaped perforations to ease the steering... The rudder is fitted with a conventional stiller. There is a small hold aft and living quarters covered with a hatch just forward of that. The remainder of the space below deck was devoted to fish holds...

According to newspaper articles, junks were launched at Santa Barbara in 1872 and 1876, at a minimum. Sing Chung, the richest of the local merchants, operated a fleet of several vessels in local waters, whose crews fished, harvested abalone, and took seals and the occasional sea otter as well.

Bell
?-1901
Gasoline Fishing Schooner

Gross Tonnage	---
Net Tonnage	---
Length	37 feet
Beam	---
Depth	---
Decks	---
Official Number	---
Construction	wood (inferred)

Historical Record

This vessel capsized in heavy seas 3 or 4 miles south of Santa Cruz Island in late December 1901. Captain Oleson (also referred to as "Harry Carson" in the newspaper account of this incident) and crewman Pete Wallace drifted at sea on the boat for 14 days until Wallace died. Three days later, Arturo Valdez picked up Captain Oleson "just beyond the kelp off Goleta." Oleson was fishing primarily for "crawfish" from a camp on Anacapa Island (SBMP, January 14, 1902). According to the newspaper, the vessel carried more than one mast. No mention is made of salvage of the vessel. Presumably it either wrecked near Goleta or was saved along with Captain Oleson.

Sea Lion
1906
Japanese Abalone Fishing Sloop

Specifications unknown.

Historical Record

A short newspaper article reports:

The launch *Pt. Firmin*, Captain Short, brought word to this city yesterday of the wreck of the sloop *Sealion* on Santa Cruz Island. The vessel is a total loss, but the crew were all saved. The *Sealion* is owned by a Japanese company, and has been engaged in the abalone trade in the channel for some time past. Owing to defective ground tackle, she drifted onto the rocks at Dick's harbor during a heavy blow a day or so ago and broke up in short order [SMBP, October 26, 1906].

Natoma 1911-1919 Fishing Sloop

Gross Tonnage	26 tons
Net Tonnage	17 tons
Length	47.5 feet
Beam	14 feet
Depth	6.2 feet
Decks	one
Official Number	209087
Construction	wood

Historical Record

The *Natoma* was a fishing sloop, with a gasoline engine for propulsion. The vessel was built in Santa Barbara and was fishing about four miles off Santa Barbara Island when a fire of unknown origin gutted the vessel (wreck report). The *Komie Maru*, another fishing vessel, saved the crew and stood by while the *Natoma* burned to the

water's edge and sank. MVUS gives the wreck location as Santa Barbara not Santa Barbara Island.

Unity 1919-1922 Fishing Boat

Gross Tonnage	40 tons
Net Tonnage	32 tons
Length	60.6 feet
Beam	15.2 feet
Depth	6.9 feet
Decks	one
Official Number	218533
Construction	wood

Historical Record

The *Unity* was built in Bellingham, Washington, and registered in Seattle (MVUS 1922). On August 25, 1922, the vessel burned at the "southeast end of Santa Cruz Island, Calif." (MVUS 1923). The wreck report gives the location as "4½ miles south of Smuggler's Cove," stating the fire was caused by a backfire in the engine.

Eagle and OK 1923 Fishing and Lobster Boats

Gross Tonnage	----
Net Tonnage	---
Length	35 feet
Beam	----
Depth	----
Decks	----
Official Number	----
Construction	wood

No statistics are available for the *OK*.

Historical Record

After sailing out of Santa Barbara on the *Eagle* at noon on January 29, 1923, Frank E. Nidever, grandson of pioneer and otter hunter George Nidever, vanished. Concern first appeared in a newspaper article (SBMP, February 11, 1923) that detailed the beginning of an extensive search. This search proved fruitless and led to the loss of the *OK*, one of the searching vessels, and its captain and mate, Jerry Shively and Isaac Newton.

According to the *Santa Barbara Morning Press* (February 21, 1923), the body of Isaac Newton was eventually found in Scorpion Bay at Anacapa Island on February 20. Later articles, however, make it clear that Scorpion Bay is actually at Santa Cruz Island. Amid highly speculative articles about foul play and rum running, the search continued. On February 25, Shively's body turned up, along with ship wreckage, in Scorpion Bay. Shattered wreckage from both boats turned up to the east around "Castle Rock," which seems to be present-day Cavern Point, Santa Cruz Island.

Captain Valdez of the schooner *Santa Cruz* reported that he had seen a large liner pass close to the vicinity of the *Eagle* when his own boat was drifting before the wind with motor problems. Widely scattered fragments of the *Eagle* that were beginning to appear along the north coast of Santa Cruz Island supported the hypothesis that the *Eagle* had been run down (SBMP, March 2, 1923).

Lion 1917-1924 Fishing Vessel

Gross Tonnage	18 tons
Net Tonnage	12 tons
Length	51.3 feet
Beam	12.6 feet
Depth	5.3 feet
Decks	one
Official Number	215807
Construction	wood

Historical Record

According to the wreck report prepared by Captain E. W. Bartell of San Pedro, a gas engine powered this vessel. The *Lion* stranded on the "Santa Cruz Ids" at 8 P.M. on July 4, 1924, after dragging anchor in a heavy wind.

Labor 1920-1924 Purse Seiner

Gross Tonnage	42 tons
Net Tonnage	22 tons
Length	59.1 feet
Beam	15.6 feet
Depth	7.2 feet
Decks	one
Official Number	222693
Construction	wood

Historical Record

Van Camp Sea Food Company provided the *Labor* as part of its tuna fleet operating out of San Pedro in the 1920s. Fleet vessels were leased to their masters, and Van Camp provided a guaranteed market for all the fish the crews could catch. Principal species were sardines and tuna.

On the night of October 2, 1924, the *Labor* was anchored for the night near the south side of Anacapa Island when its mooring broke and the boat drifted onto the rocks. When master Visko Spero tried to start the engines, he found the propeller fouled with kelp and the vessel helpless. The crew of eight survived, but the vessel and its 3 tons of barracuda were all lost. The *Labor* has not yet been located.

Maryland

1916-1927

Fishing Vessel

Gross Tonnage	24 tons
Net Tonnage	16 tons
Length	52 feet
Beam	13.7 feet
Depth	5.5 feet
Decks	one
Official Number	214495
Construction	wood

Historical Record

This vessel, with a crew of three, all of whom survived, burned 2.5 miles off Pelican Bay, Santa Cruz Island, on August 19, 1927 (MVUS 1928 and final license). The crew left the boat in the skiff and were rescued by the *Ka-eri* (wreck report). Van Camp Sea Food company owned the vessel.

Blue Sea

1918-1928

Fishing Vessel

Gross Tonnage	40 tons
Net Tonnage	26 tons
Length	61.5 feet
Beam	15.1 feet
Depth	6.5 feet
Decks	one
Official Number	217149
Construction	wood

Historical Record

This vessel, built and home-ported in Los Angeles, stranded on the "Santa Barbara Islands, Calif." on October 27, 1928 (MVUS 1929), with no loss of life. No account of the vessel's accident has been located. The use of the verb *stranded* implies that the remains of the *Blue Sea* should lie somewhere in intertidal waters around one of the four northern Channel Islands. Another source, *Record of Marine Casualties*, gives the wreck site more specifically as the "northwest side of Santa Barbara Island."

Adriatic

1920-1930

Purse Seiner

Gross Tonnage	42 tons
Net Tonnage	18 tons
Length	60.5 feet
Beam	15.5 feet
Depth	7.0 feet
Decks	one
Official Number	223392
Construction	wood

Historical Record

This short article in the *Los Angeles Times* succinctly describes the end of the *Adriatic*, a sardine fishing boat.

The San Pedro fishing boat *Adriatic*, a sixty foot purse seiner owned by Dick Perica, struck a log, the seams opened up, and it sank at 9 A.M. Sunday five miles off Santa Barbara Island. Perica and his crew of eight abandoned the craft in a skiff, rowing for perhaps an hour before they were picked up by the purse seiner *Georgia* and brought to San Pedro, arriving yesterday morning. Nets and twenty tons of sardines also went down with the ship, the loss being estimated by Perica at \$20,000, most of which was covered by insurance [LAT, December 30, 1930].

The wreck report gives the location as "five miles southwest... Santa Barbara Island.." and attributes the sinking to a defective pump which was unable to contain a leak, saying nothing about a log. The *Adriatic* was one of the vessels active early in the development of the fishing industry in Los Angeles. *Merchant Vessels of the United States*, 1930 edition, lists the *Adriatic* as a wooden vessel with diesel propulsion. It was built in Los Angeles in 1920, originally named the *Carl F. Lehmers*, and had been powered by a gas engine.

If the newspaper account is accurate, the wreckage is well outside the boundary of Channel Islands National Park but lies within the marine sanctuary. Waters 5 miles out from Santa Barbara Island range in depth

generally from 67 to 657 fathoms, except on top of Osborn Bank, a popular fishing spot, where a minimum depth of 19 fathoms barely falls within normal scuba depth limits.

Emperor 1927-1932 Fishing Vessel

Gross Tonnage	56 tons
Net Tonnage	38 tons
Length	61.6 feet
Beam	17.0 feet
Depth	8.4 feet
Decks	one
Official Number	226573
Construction	wood

Historical Record

The *Emperor* foundered "off Santa Barbara Island" on July 15, 1932. The vessel had been constructed in Gig Harbor, Washington, in 1927 (MVUS). The wreck report states the vessel sank 6 miles east of the east end of Santa Barbara Island while the vessel was en route to Catalina Island. The wreck report gives the date of the wreck as July 12, along with the following narrative:

...began hand pump as soon as water was discovered (0500) - left vessel at 0630, heading for Santa Barbara Island - sighted US Coast and Geodetic survey vessel *Virginia* at 0830. *Virginia* sighted crew at 1000; *Virginia* picked up crew at 1010 and returned to *Emperor* at 1100; *Virginia* not equipped to give any assistance but a light was left at the mast of the boat, which was left floating at noon "bow down, stern about three feet

above water, mast partly visible above water." When we arrived at the scene of the accident the next day in the salvage vessel "*Peacock*" found only the turn table of the "*Emperor*" floating a few boxes. There were no trace of the boat.

Imperial
1914-1936
Sport-fishing Boat

Gross Tonnage	22 tons
Net Tonnage	15 tons
Length	54.2 feet
Beam	15.0 feet
Depth	4.9 feet
Decks	one
Official Number	212356
Construction	wood

Historical Record

Strong storms beached the sport-fishing boat *Imperial*, a converted tug, at Alamos anchorage (present-day Willows anchorage), Santa Cruz Island. After receiving a call for assistance through the Anacapa Lighthouse, the Coast Guard dispatched the cutter *Calypso* to aid the beached vessel. The *Calypso* removed Captain Edward Gorman and three crew members from the vessel, returning them to San Pedro (LAT, November 1, 1936).

The tug *A E Williams*, of the Red Stack Line, steamed to Santa Cruz Island to pull the *Imperial* from the beach. The vessel was actually reported under tow to Los Angeles (LAT, November 4, 1936). The salvage attempt apparently was successful, although the vessel is reported as lost in MVUS (1937) and was described as a "total loss" on the vessel's final certificate of registry. Records in the National Archives indicate the vessel

was reconstructed retaining the same official number and sold to Mexican owners in 1939.

Louise Ray
1927-1937
Purse Seiner

Gross Tonnage	52 tons
Net Tonnage	27 tons
Length	63.8 feet
Beam	16.7 feet
Depth	7.7 feet
Decks	one
Official Number	226822
Construction	wood

Historical Record

The *Louise Ray* was built in Los Angeles in 1927 and was owned by the Italian Food Products Company of that city. In 1937, the following incident occurred:

The sixty-five foot San Pedro purse seiner boat *Louise Ray* yesterday was reported ashore on little Anacapa Island, sixty-five miles from here. Her crew of nine, including the owner, Antone Stanovich, were safe aboard the Coast Guard patrol boat *Aurora*, which was standing by.

The salvage tug *Retriever* under Capt Edison Brown, was dispatched to the vessel's aid yesterday forenoon and was expected to patch and refloat the craft, which was said to be pinioned on her port bow [LAT, November 6, 1937].

Despite the optimism expressed in the article, the *Louise Ray* sank, according to its final license, which states: "Vessel stranded

Anacapa Island, Mexico [sic] Nov. 4 1937,
10:45 P.M. Total Loss. No lives lost."

A strange collision with the *California II* is involved in this sinking. The skipper of the *California II* stated in the wreck report, "Stanovich deliberately steered the vessel directly into my vessel...making other threatening and insulting remarks." The wreck report for the *Louise Ray* states simply "the man at the wheel went to sleep."

Yukon
1920-1938
Diesel Fishing Boat

Gross Tonnage	43 tons
Net Tonnage	29 tons
Length	61.4 feet
Beam	14.6 feet
Depth	7.3 feet
Decks	one
Official Number	219965
Construction	wood

Historical Record

The *Yukon* sank after a collision at Chinese Harbor, Santa Cruz Island on January 6, 1938 (MVUS 1938). The *Yukon* miscalculated while fishing, striking the purse seiner *Long Island*. The *Yukon* sprang a leak and the crew of eight abandoned when unable to keep the boat from sinking. As they reached the *Long Island*, the *Yukon* exploded and burned, nets and all. The *Yukon* was fishing for sardine and mackerel.

Dante Alighieri II
1937-1938
Purse Seiner

Gross Tonnage	97 tons
Net Tonnage	53 tons
Length	70.1 feet
Beam	20.6 feet
Depth	8.6 feet
Decks	one
Official Number	236704
Construction	wood

Historical Record

This vessel crashed into the southwest coast of Santa Barbara Island during a heavy fog on November 30, 1938. Nine crew members left the boat for a narrow ledge on the island. Late in the day, the Coast Guard cutter *Aurora* (Figure 7.3) rescued these men as well as the six crew members who had remained aboard the *Dante Alighieri II*. No injuries occurred to any of the crew (LAT, December 1, 1938).

The cruise report of the *Aurora* gives further details of the operation:

Wednesday, 30 November, 1938: On trailing duty, Los Angeles Harbor. At 0324 received word from the purse seiner *Sea Rover* via radio telephone that the purse seiner *Dante Alighieri* had gone aground on SW end of Santa Barbara Island in a dense fog and nine

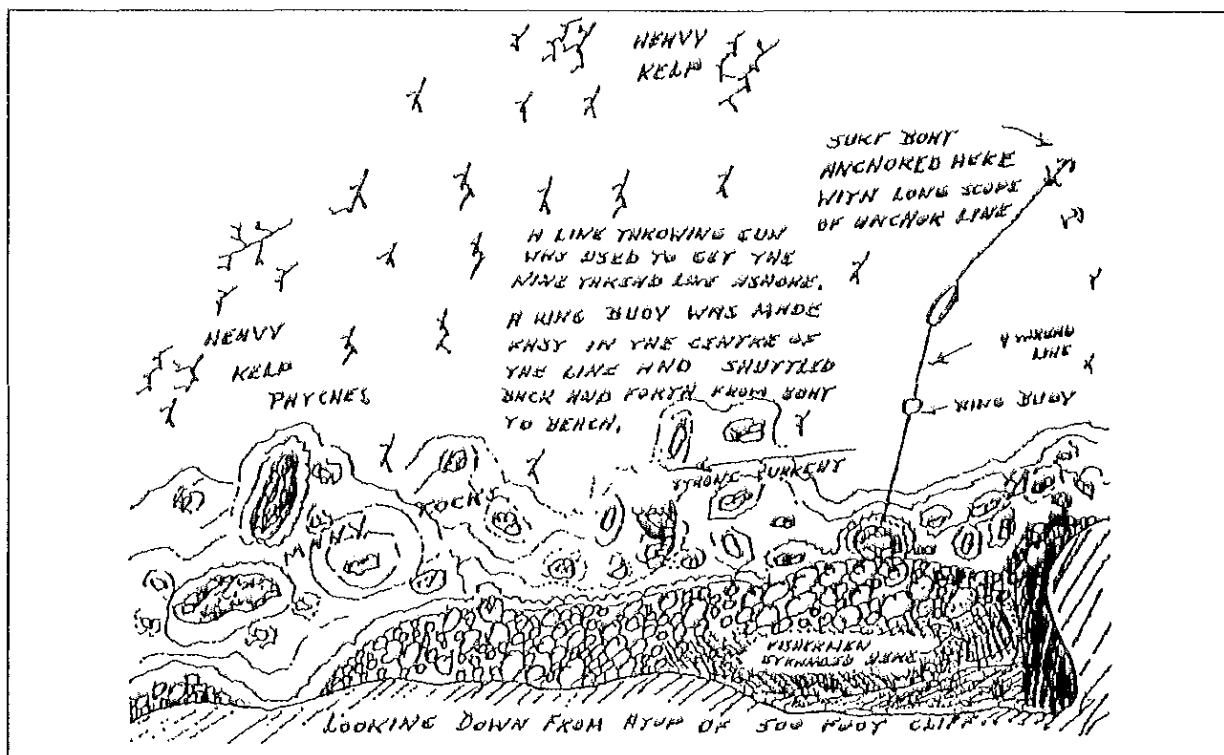


Figure 7.3. Diagram accompanying cruise report of the *Aurora* showing the method of rescue.

men were marooned on the beach. Immediately got underway and proceeded at 15 knots to her assistance. Arrived at scene of disaster at 7:00 a.m. to find an exceptionally heavy surf breaking on the beach. The *Dante Alighieri* had broken up and was a total loss. Due to the heavy surf and the great amount of drifting wreckage, contact from seaward was impossible at this time, although an attempt was made to shoot lines ashore from a small boat. At 10:15 sent landing party with gear ashore on lee side of the island to effect a rescue from the top of a 500 foot cliff. This procedure proved unsuccessful due to dangerous contours of the cliff and loose rocks. However, a survey was made of the situation from the cliff as to the best

approach by small boat. The landing party returned to the ship at 1330 and the *Aurora* stood around the island to locate anchorage off the position of the marooned fishermen. It was found with high tide the sea was less boisterous and the wreckage had drifted away leaving the water clear for running a line ashore. At 1415 anchored and sent boat in toward the beach. A line was shot ashore and a 9 thread line sent in with a ring buoy made fast midway. By picking out a good place for the fishermen to plunge into the surf from the beach and watching the seas carefully, rescue was effected by taking one man off at a time. The life ring was pulled out to a small boat anchored just beyond the breaker line. When the man was

safe aboard the boat the line was hauled back by the fishermen on the beach, thus by shuttling the ring buoy back and forth in this manner every man was taken off this treacherous part of the island safely. The job was completed at 1530. Valuable assistance was rendered by two or three skiffs manned by fishermen from nearby fishing vessels who stood by. They helped to pull the men out of the water and acted as translators in giving directions to the stranded men, who in most cases spoke only Italian. Medical assistance was rendered those cut by sharp rocks and barnacles and all men were furnished dry clothing and hot food aboard the *Aurora*. The *Aurora* then proceeded to Los Angeles Harbor with 12 members of the fishing boat crew aboard (including 3 who had come aboard upon arrival of this vessel) arriving at 6:30 p.m. 1845 Moored at Coast Guard dock. The 12 survivors of the purse seiner *Dante Alighieri* left the ship [USCG Records, National Archives].

Lieutenant Commander Niels Haugen, commanding the *Aurora*, received a letter expressing:

The sincere gratitude and thanks of our selves and our families for the highly courageous [*sic*] and commendable rescue. . . . The conditions under which this rescue was enacted and the manner in which the officers and men of the Coast Guard Patrol Boat "Aurora" conducted themselves during the rescue is a very shining example of why your splendid service holds such

a high position in the esteem of the citizens of our country, particularly among those men who go to sea and their families who await them at home.

The letter has 15 signatures, including those of all 12 men rescued by the *Aurora*. Probably equally appreciated was the formal memorandum Haugen received from his superior, which stated: "Headquarters appreciate the excellent judgment exercised by you on this occasion, and the skill and resourcefulness employed by you in accomplishing your objective" (USCG Records, National Archives).

This is the only vessel definitely known to have wrecked upon Santa Barbara Island. First licensed in September 1937, the *Dante Alighieri II* did not last long enough to be listed in MVUS. The abundant and clear documentation of the crew's rescue should allow the wreck scatter to be located.

Archeological Record

A Park Service team has located the propeller, winch, and the four cylinder Atlas Imperial diesel engine of the *Dante Alighieri* at Santa Barbara Island.

Emil
1926-1938
Fishing Vessel

Gross Tonnage	48 tons
Net Tonnage	33 tons
Length	62.1 feet
Beam	16.0 feet
Depth	7.7 feet
Decks	one
Official Number	230776
Construction	wood

Historical Record

The *Emil* sank 2 miles off Santa Cruz Island on December 1, 1938 (MVUS 1939). None of the 10 crewmen were lost.

Nancy Lee

1946

Commercial Fishing Boat
(Converted Cabin Cruiser)

Specifications unknown.

Historical Record

Carrying a crew of three, the *Nancy Lee* swamped in heavy seas midway between Anacapa and Santa Cruz islands in March 1946. The crew took to the skiff, which in turn swamped. Bernice Brown alone survived by returning to the boat, using an empty gas can for floatation, and eventually swimming to Frenchy's Cove, where she waited 14 days for an eventual rescue by the Coast Guard. Her husband and brother-in-law were lost. This vessel is referred to as the *Nancy B* in some accounts.

Balboa

1937-1949

Commercial Purse Seiner

Gross Tonnage	128 tons
Net Tonnage	68 tons
Length	81.0 feet
Beam	22.0 feet
Depth	10.3 feet
Decks	one
Official Number	235502
Construction	wood

Historical Record

According to the *Los Angeles Times* (January 19, 1949), *Balboa* burned and sank "off Anacapa Island" on January 18, 1949. The fire began in the engine room from an electric motor. The responding Coast Guard cutter was unable to board the vessel and fight the fire because the purse seine (net) floated around the *Balboa*. The *Balboa* and crew, all of whom survived, were from San Francisco. This vessel is listed in the 1950 MVUS as having been lost "off the California coast near Los Angeles."

Santa Clara

?-1949

Fishing Vessel

Gross Tonnage	----
Net Tonnage	----
Length	----
Beam	----
Depth	----
Decks	----
Official Number	----
Construction	wood

Historical Record

The *Santa Clara* disappeared at sea on April 28, 1949, under mysterious and controversial circumstances. There was considerable enmity between the vessel's operators, Francis M. (Jocko) Hunsakor and Robert (Bob) Ellis. The vessel was often known as "Bob and Jocko" after these two, who were quarreling as the vessel last sailed.

In May 1954, the trawler *Sebastian L* snagged wreckage in 70 fathoms off the east

end of Santa Cruz Island. Joe Castagnola, representing the Castagnolas who owned the *Santa Clara*, and Paul Lindwall, a former crew member, inspected the "anchor winch, chain, mast, stays, rudder, quadrant, horn timber, and part of the stove." The inspectors considered the winch head particularly diagnostic of the *Santa Clara* (SBMP, May 5, 1954). The depths reported in the newspaper for the place where the wreckage was found occur some 4 to 5 miles off San Pedro Point, both north and south of the Anacapa Passage, which reaches a maximum depth of 30 fathoms.

Equator
1949-1949

Commercial Fishing Vessel

Gross Tonnage	238 tons
Net Tonnage	103 tons
Length	92.9 feet
Beam	26.6 feet
Depth	12.6 feet
Decks	one
Official Number	257143
Construction	wood

Historical Record

The *Los Angeles Times* of July 3, 1949, reports:

A captain and five crew members of the fishing craft *Equator* escaped drowning yesterday when they were rescued by the Coast Guard after their boat sank near Anacapa Island, twenty miles from San Pedro.

Nick Trutanich . . . [of] San Pedro, owner and master of the *Equator*, said

his craft struck rocks 150 yards from the island's shore and went down quickly in 4 1/2 fathoms of water.

The Coast Guard buoy tender *Blackthorn* raced to the scene and picked up the struggling men scant minutes after they were thrown in the ocean.

The *Blackthorn* had received a distress call for the *Equator* at 3:00 A.M. while anchored at Los Angeles. Underway 20 minutes later, the Coast Guard vessel reached the scene off Anacapa Island by 9:38 A.M., picking up the crew. Their log gives the location of the wreck as 34° 00' 25" N, 119° 23' W.

The *Equator* is the largest fishing vessel wrecked in the park. Apparently new when it sank, it was built at a time when fishing vessels were steadily increasing in size (Scovill 1951:41). The wreck of the *Equator* was not recorded until the 1963 MVUS in which it is stated, "Exact location unknown."

The *Equator* had not been fishing in local waters; the vessel was conveying frozen fish caught in Central American waters to a plant in the Pacific Northwest when it wrecked on Anacapa Island. In this respect, the *Equator* stands apart from all the other fishing vessels that have wrecked in the area. The ship really should be considered more a transient vessel than a member of the local fishing fleet.

Archeological Record

A wreck scatter near East Fish Camp, Anacapa Island, is the remains of the *Equator*. This material is scattered in shallow water and in a sea cave (Figure 7.4) at the coordinates given above. A bronze propeller (Figure 7.5) and a 5-inch-diameter drive shaft over 46 feet



Figure 7.4. *Equator* propeller shaft exposed during a minus tide. Photo by Dave Bunnell.

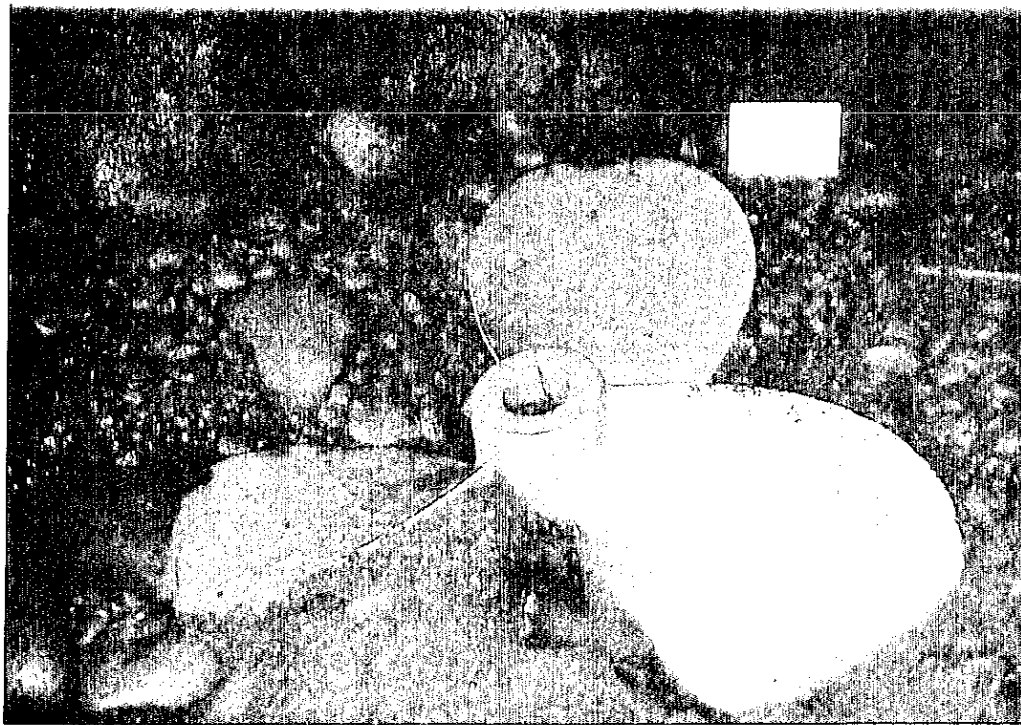


Figure 7.5. A little deeper into the cave lies the *Equator* propeller. Photo by Dave Bunnell.

long are the most notable items in the wreckage. No engines or machinery have been observed in the wreck scatter, indicating that the vessel was thoroughly salvaged.

San Francisco
1943-1949
Purse Seiner

Gross Tonnage	128 tons
Net Tonnage	63 tons
Length	78.6 feet
Beam	22.2 feet
Depth	10.1 feet
Decks	one
Official Number	243764
Construction	wood

Historical Record

This vessel burned to the waterline on October 31, 1949, either "about 2 miles west of the west end of Anacapa Island, 34° 01' N, 119° 19' 5" W, southern Calif" (MVUS 1951:940) or "five miles off Hueneme" (SBNP, November 1, 1949). The coordinates given in the MVUS lie about 2 miles east of the east end of Anacapa Island, a point some 11 miles west of the newspaper position. Perhaps the two locations describe the path

taken by the burning hulk of the *San Francisco*. In any case, the vessel is evidently not within the park.

Pan Pacific
1948-1950
Purse Seiner

Gross Tonnage	226 tons
Net Tonnage	99 tons
Length	95.5 feet
Beam	26.6 feet
Depth	12.5 feet
Decks	one
Official Number	254926
Construction	wood

Historical Record

This vessel, often placed on Channel Island shipwreck lists, sank southeast of Anacapa Island, about ten miles outside the sanctuary at 33° 46' 45" N, 119° 10' 20" W. The crew of four, accompanied by two seven-year-old boys along for the ride, took to the skiff as the purse seiner sank. Rescue came after Point Mugu radar spotted the skiff within a prohibited area of the test range. According to reports, the young boys preferred drifting at sea to returning to school.

Milmar
1921-1950
Fishing Boat

Gross Tonnage	44 tons
Net Tonnage	30 tons
Length	61.3 feet
Beam	17.0 feet
Depth	8.1 feet
Decks	one
Official Number	256076
Construction	wood

Historical Record

The *Los Angeles Times* of August 23, 1950 reports:

Three men were rescued yesterday after the 65' fishing boat *Milmar* caught fire from an overheated engine and sank ten miles east of Santa Barbara Island, the U.S. Coast Guard reported.

The crew of the *Milmar*, working out of Eureka, was taken aboard the San Diego fishing boat *Sequoia* and transferred to the Los Angeles fishing boat *Barbara* which brought them to San Pedro last night.

If the *Los Angeles Times* is correct in the location of the vessel, it is definitely outside the sanctuary and the park, at a depth of at least 172 fathoms.

San Giuseppe
1935-1950
Purse Seiner

Gross Tonnage	109 tons
Net Tonnage	59 tons
Length	79.3 feet
Beam	22.5 feet
Depth	9.0 feet
Decks	one
Official Number	234348
Construction	wood, steel reinforced

Historical Record

The *San Giuseppe* originated in San Francisco as a trawler. Its General Motors 260-horsepower diesel engine, with a hydraulic reverse clutch, powered a single propeller 3.5 feet in diameter. The French Sardine Company, later known as Star-Kist Tuna, purchased the vessel, moved it to southern California, and converted the vessel into a purse seiner for sardine fishing.

On the evening of December 18, 1950, the hydraulic line to the clutch burst, spraying fluid all over the hot engine exhaust manifold. A fire quickly erupted and spread throughout the vessel (Figure 7.6). A Coast Guard cutter from Santa Barbara assisted the 12-man crew in fighting the blaze, which proved fruitless. The *San Giuseppe* sank south of Anacapa Island in the early afternoon of December 19. The crew escaped injury and rode home on the purse seiner *Marcia Anne*. Barksdale (1989) reports that gear and engine were salvaged



Figure 7.6. *San Giuseppe* burning near Anacapa Island. Salvage of the net is underway. Photo courtesy of Budd Gonder.

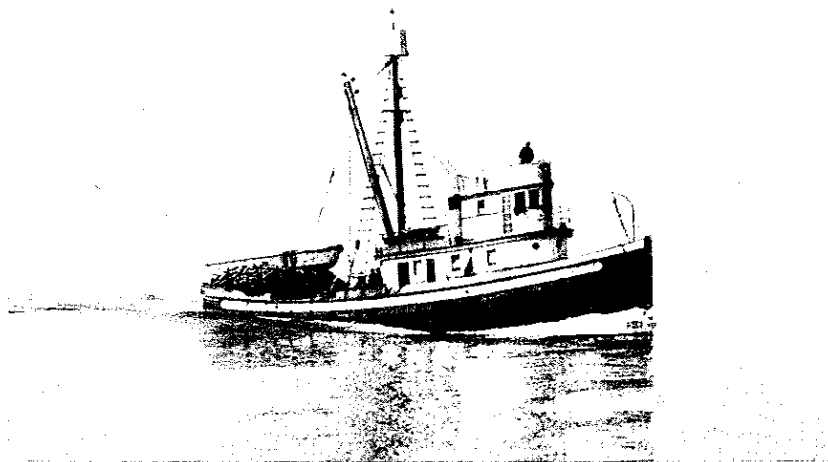


Figure 7.7. *Pacific* underway February 22, 1932. Photo courtesy of Sherman Library and Archives.

before the end of the month by Channel Island Salvage Corporation.

Pacific
1928-1951
Purse Seiner

Gross Tonnage	89 tons
Net Tonnage	45 tons
Length	73.0 feet
Beam	18.7 feet
Depth	8.6 feet
Decks	one
Official Number	227246
Construction	wood

Historical Record

On October 27, 1951, this vessel sank 15 miles northeast of San Nicholas Island, which places its remains about 4 miles outside the Santa Barbara Island portion of the marine sanctuary in water 400 to 900 fathoms deep. The crew of 11 was rescued by a Coast Guard PBM plane. The *Pacific* was formerly YNT-21 (Figure 7.7).

Golden Gate
1944-1952
Fishing Boat

Gross Tonnage	120 tons
Net Tonnage	57 tons
Length	73.4 feet
Beam	22.0 feet
Depth	10.3 feet
Decks	one
Official Number	246308
Construction	wood

Historical Record

The *Los Angeles Times* reported on January 30, 1952:

The San Pedro fishing boat *Golden Gate* was afire late last night 10 miles east of Santa Cruz Island and the captain and crew of 10 were forced to abandon the ship. They were taken aboard the fishing boat *Sea Pride*.

The vessel formerly had been registered as the *Sunlight* (MVUS 1952). The 1953-54 MVUS gives the location of the sinking of the *Golden Gate* as "about 1 mile southeast of Sand Stone Point, Santa Cruz Island, Calif." Considering the relatively imprecise locations just quoted and the vagaries of a drifting boat, the location of the *Golden Gate* is not known with any precision. It may not even be within the park.

Del Rio
1935-1952
Purse Seiner

Gross Tonnage	110 tons
Net Tonnage	57 tons
Length	78.1 feet
Beam	21.5 feet
Depth	9.8 feet
Decks	one
Official Number	234477
Construction	wood

Historical Record

Originally a purse seiner, the *Del Rio* became the auxiliary minesweeper *Grosbeak*

AMC-19 on November 11, 1940. Assigned to the San Francisco area, the vessel performed minesweeping and training duties. The vessel reverted to civilian ownership in April 1945, returned to the former owner.

What we know of the fate of the *Del Rio* comes from the *Los Angeles Times*, October 29, 1952:

The 82' purse seiner *Del Rio* was destroyed by fire early yesterday three miles off Anacapa Light but 11 men aboard were saved by other vessels. Loss was estimated at \$80,000.

The Coast Guard said the fire started about 3 a.m. from a backfire in the engine room. Two other purse seiners, the *Sea Ranger* and *Monarch*, rescued Captain Frank Bosnich . . . Owner Marijan Katnich . . . and the crew of nine.

A Coast Guard marine casualty report adds that the burning boat "drifted on beach and sand between Big Anacapa island and little Anacapa island," giving latitude and longitude consistent with Frenchy's Cove. The engine block and at least some of the other debris found at this location today is most likely from the *Del Rio*.

Archeological Record

A six cylinder engine block of massive proportions lies in the intertidal zone at Frenchy's Cove, Anacapa Island. The number of cylinders and their dimensions are compatible with the engine listed in the records for the *Del Rio*.

Cape Argo 1947-1954 Fishing Vessel

Gross Tonnage	38 tons
Net Tonnage	26 tons
Length	44.1 feet
Beam	14.5 feet
Depth	9.3 feet
Decks	one
Official Number	253429
Construction	wood

Historical Record

Home-ported in Seattle and formerly known as the *Doris*, the *Cape Argo* burned to the waterline 5 miles northwest of Santa Barbara Island. Peter Toft, the owner and captain, and a crewman were rescued by another fishing boat (LAT, September 6, 1954).

Ruth E 1946-1955 Fishing Vessel

Gross Tonnage	25 tons
Net Tonnage	11 tons
Length	43.5 feet
Beam	13.8 feet
Depth	6.5 feet
Decks	one
Official Number	250964
Construction	wood

Historical Record

The *Ruth E*, out of Tacoma, Washington, burned on January 9, 1955, at 33° 51' N,

119° 51' W, which is about 6 nautical miles south of Santa Cruz Island (MVUS 1956:745). A speeding navy crash boat, alerted by the radar station on the island, rescued two crewmen from their dory (SBMP, January 10, 1955). The *Ruth E* sank very close to the southern boundary of the sanctuary in water over 500 fathoms deep.

Gypsy Q
1925-1955
Commercial Fishing Vessel

Gross Tonnage	48 tons
Net Tonnage	19 tons
Length	71.4 feet
Beam	13.6 feet
Depth	6.9 feet
Decks	---
Official Number	254596
Construction	wood

Historical Record

The *Gypsy Q* began life as a Coast Guard vessel, CG-276, built in Seattle, Washington, by the Seattle Dry Dock and Construction Company as part of a large increase in the Coast Guard fleet in 1924 and 1925. MVUS (1930) provides the statistics listed above. The *Gypsy Q* was one of an extensive class of patrol boats that were brought into service at this time. Originally gasoline powered, it was later converted to diesel. By 1955, the *Gypsy Q* was a commercial fishing boat (Wamba 1989). Coast Guard casualty reports state that the vessel sank 10 miles south of Anacapa light at 1:05 A.M. on August 24, 1955. On this trip, the *Gypsy Q* was carrying a cargo of lumber, gas drums, and building materials to South Point, Santa Rosa Island, for the Petroleum Construction Company of Compton, California. The history of this

vessel indicates an interesting study if the vessel is located.

Louise D
1947-1955
Fishing Vessel

Gross Tonnage	22 tons
Net Tonnage	10 tons
Length	41.5 feet
Beam	13.8 feet
Depth	5.6 feet
Decks	one
Official Number	252516
Construction	wood

Historical Record

The *Louise D* burned and sank between Santa Cruz and Anacapa Islands on the afternoon of September 2, 1955. The two-man crew was rescued by a nearby fishing boat (MVUS 1956; SBNP, September 2, 1955).

Dorothy M
1945-1958
Fishing Boat

Gross Tonnage	18 tons
Net Tonnage	9 tons
Length	38.6 feet
Beam	12.7 feet
Depth	6.2 feet
Decks	one
Official Number	248634
Construction	wood

Historical Record

The *Dorothy M* is reported to have stranded "at Anacapa Island, Calif. lat 34° 04' 00" N, 119° 6' 23" W on 5 February 1958"

(MVUS 1959). This position is near the west end of East Anacapa, but nearly 3 miles north of the island, in very deep water where stranding would be unlikely. The Coast Guard casualty report gives a latitude much closer to shore.

Coast Guard reports state that the vessel was anchored on the north side of Anacapa Island, seeking shelter from a southeast wind. The wind shifted to the northwest, the anchor dragged, and the vessel stranded on the island.

Ruth K
1944-1960
Fishing Vessel

Gross Tonnage	14 tons
Net Tonnage	6 tons
Length	34.3 feet
Beam	11.6 feet
Depth	4.0 feet
Decks	one
Official Number	261271
Construction	wood

Historical Record

This vessel stranded at San Miguel Island on December 13, 1960 (MVUS 1961), when the anchor line parted while the crew slept. The Coast Guard gives the location as "San Miguel Island, Cuyler Harbor, offshore Prince Is."

Vineth
1940-1961
Fishing Boat

Gross Tonnage	14 tons
Net Tonnage	5 tons
Length	37.5 feet
Beam	11.0 feet
Depth	5.5 feet
Decks	one
Official Number	239460
Construction	wood

Historical Record

The MVUS editions for 1961 and 1962 reveal that the *Vineth*, built in Bellingham, Washington, and registered in Los Angeles, stranded "one mile southwest of Smugglers Cove, Santa Cruz Island" on September 1, 1961. The Coast Guard casualty report describes the event this way: "On automatic pilot—went below to prepare evening meal—course about 290T. Good safe course—After some 15 to 20 mins, vessel grounded on rocks—Heading was changed by defective auto-pilot—Clutch must have slipped—It has done that before. Went over rocks and then continued on to beach. Vessel sank in 3 feet of water—Not a menace to Navigation."

Carol O
?-1961
Fishing Boat

Gross Tonnage	13 tons
Net Tonnage	7 tons
Length	37.5 feet
Beam	10.6 feet
Depth	4.4 feet
Decks	one
Official Number	276479
Construction	wood

Historical Record

The *Carol O* caught fire and sank 5 miles northeast of Santa Rosa Island (LAT, October 16, 1961) or "approximately 7 miles northeast of the Santa Rosa Island Channel" (MVUS 1963). The two crewmen aboard were rescued by a nearby boat. This vessel probably lies inside the sanctuary boundary and may rest inside the park.

Josie Lena
1940-1962
Fishing Boat

Gross Tonnage	27 tons
Net Tonnage	18 tons
Length	47.5 feet
Beam	14.5 feet
Depth	6.3 feet
Decks	one
Official Number	239867
Construction	wood

Historical Record

The *Josie Lena* dragged anchor in the predawn hours of August 5, 1962 and carried its crew of four and their catch of rock cod up onto the beach at Cuyler Harbor, San Miguel Island. Heavy swells demolished the vessel (SBMP, April 5, 1962 and April 6, 1987). The *Josie Lena* was requisitioned for military service two days after Pearl Harbor.

Georgia
?-1964
Lobster Boat

The *Los Angeles Herald Examiner* reported the loss of the 40 foot *Georgia* on November 17, 1964, and the rescue of its owner, Tony J. Souza and his dog Billy. The vessel sank at anchor "in a cove of Santa Cruz" after being accidentally rammed by a skiff. A Coast Guard helicopter hoisted Souza and his dog to safety and flew them to Point Mugu. Was this vessel the same *Georgia* which rescued the crew of the *Adriatic*?

Dolphin IV
1934-1962
Mac. [sic] (Mackerel Fishery?)

Gross Tonnage	6 tons
Net Tonnage	5 tons
Length	26.5 feet
Beam	9.0 feet
Depth	4.3 feet
Decks	one
Official Number	233428
Construction	wood

Historical Record

Registered in San Francisco and built in Seattle, the *Dolphin IV* burned "at Santa Cruz Island, off the coast of California" on December 4, 1962 (MVUS 1963). From the casualty report:

We had anchored in 45 feet of water, inland side of Santa Cruz Island. We started the primus burner to cook dinner. While both men were momentarily on deck, the primus burner apparently spewed burning kerosene around the main cabin. Fire burned out of control despite foam type extinguisher used immediately. A CO2 type extinguisher inside boat could not be reached. Fear of fuel injection (gasoline 50-60 gallons) forced us to jump and swim to island.

The coordinates listed on the report suggest that the vessel sank between Prisoners and Chinese Harbors. Both the casualty report and a newspaper article state that the vessel was a sailboat.

Broadbill
1917-1966
Fishing Vessel

Gross Tonnage	34 tons
Net Tonnage	17 tons
Length	62.5 feet
Beam	13.6 feet
Depth	6.1 feet
Decks	one
Official Number	215227
Construction	wood

Historical Record

According to MVUS (1965), the *Broadbill* had previously been known as the *Broadbill* (USN), which is apparently the SP-823, "a 66-foot motor boat of 1918-19 . . . also known as *Broadbill*" (*Dictionary of American Naval Fighting Ships* 1959:160). This is consistent with the *Broadbill*'s origin in 1917, as listed in MVUS. The vessel wrecked before dawn on August 20, 1966, on the northwestern side of Santa Rosa Island (SBNP, August 22, 1966). The *Cape Sable*, a Coast Guard cutter, rescued owner Earl Aggus and a crewman, returning them to Santa Barbara. The vessel had been en route to Morro Bay from Wilmington.

Archeological Record

Peter Howorth has stated that wreckage in the first cove just east of Orr's Camp, which lies between Garanon and Tecolote canyons on Santa Rosa Island, is that of the *Broadbill*. The largest piece is a diesel engine block still in place above portions of the hull with concrete filled bilges. This massive fragment is often covered with sand and kelp. About 300 meters to the east are twin engine blocks and smaller pieces that relate to another

vessel. The *Pleides*, yet another fishing vessel, drifted ashore here, virtually on top of the *Broadbill*, in 1992. As this vessel breaks up, its wreckage will mingle with material from the *Broadbill*.

Cinnamon Bear
1944-1966
Fishing Vessel

Gross Tonnage	14 tons
Net Tonnage	9 tons
Length	50.0 feet
Beam	12.8 feet
Depth	4.8 feet
Decks	one
Official Number	260737
Construction	wood

Historical Record

Formerly the U.S. Navy's No. 23318, the *Cinnamon Bear*, burned at Twin Harbor, Santa Cruz Island, on August 26, 1966 (MVUS 1968). According to the Coast Guard casualty report:

On Friday morning, August 26, after running around most of the night looking for bait, the crew decided to rest a few hours before returning to port. As on almost all vessels working at night, the coffee pot is kept hot. At any rate, while securing for little rest, there was a terrific explosion in the galley that could only have been caused by a galley stove. Operator dumped one fire extinguisher but could not get to the others. There was not even time to get a radio message out as it happened too fast and flames engulfed the wheel house.

Shoshoni
1944-1967
Fishing Vessel

Gross Tonnage	55 tons
Net Tonnage	19 tons
Length	63.0 feet
Beam	17.8 feet
Depth	8.3 feet
Decks	one
Official Number	278356
Construction	wood

Historical Record

The *Shoshoni* stranded at Santa Rosa Island on January 19, 1967 (MVUS 1968).

Eileen D
1944-1967
Fishing Vessel

Gross Tonnage	14 tons
Net Tonnage	6 tons
Length	34.3 feet
Beam	11.6 feet
Depth	4.0 feet
Decks	one
Official Number	261529
Construction	wood

Historical Record

The *Eileen D* capsized and sank off Santa Rosa Island when a heavy bait tank broke loose and shifted to one side (VSFP, August 23, 1967). The three aboard the boat were rescued by nearby fishing boats.

Warrior
1914-1967
Fishing Vessel

Gross Tonnage	82 tons
Net Tonnage	56 tons
Length	78.0 feet
Beam	17.0 feet
Depth	9.6 feet
Decks	one
Official Number	211956
Construction	wood

Historical Record

The *Warrior* struck a reef off San Miguel Island in heavy fog and sank on October 13, 1967. A Coast Guard helicopter rescued the two crewmen who were stranded on the island (MVUS 1970; SBNP, October 14, 1967). The exact location of the wreck is not specified.

Mary
1891-1968
Fishing Vessel

Gross Tonnage	77 tons
Net Tonnage	47 tons
Length	64.4 feet
Beam	24.0 feet
Depth	5.0 feet
Decks	one
Official Number	92322
Construction	wood

Historical Record

Built in San Francisco and home-ported in Los Angeles, this vessel had the longest career

of any vessel reported in this study. Built by William Munder, master carpenter, in San Francisco in 1891, the vessel was originally rigged as a schooner. In 1915, the *Mary* was rerigged as a sloop. A certificate of inspection dated June 1940, states that the vessel was rebuilt in 1925, which may be when the *Mary* acquired the one cylinder gas engine, 10 inch bore and 7 inch stroke then listed. MVUS 1969 gives a horsepower rating of 127 for the vessel, which must be another engine.

The *Mary* foundered 6.5 miles "from Gull Light Santa Cruz Island CA" on May 20, 1968 (MVUS 1970:1299). The remains of the vessel should lie within the sanctuary in approximately 700 fathoms of water. The Coast Guard casualty report described the vessel's loss as follows:

The vessel began leaking while heading west into a choppy sea and thirty to forty knot winds. By 6 PM the boat was taking water on the starboard side. Leaking became worse through the evening and the pumps were unable to keep up with the leaks. When plans were lost, the Coast Guard was called. They arrived at 1 AM, placed two more pumps aboard, and took *Mary* in tow. By 4 AM, the decks were awash, pumps were inoperative, and the decking was breaking up. The major leak opened at an inaccessible point in the hull underneath the chain locker. As the Coast Guard put it, "this casualty was caused when the

hull planking fasteners failed due to old age and the hull was then open to the sea with progressive flooding."

Rosemond R
1950-1969
Sport-fishing Boat

Gross Tonnage	18 tons
Net Tonnage	8 tons
Length	40 feet
Beam	13.6 feet
Depth	5.0 feet
Decks	one
Official Number	260203
Construction	wood

Historical Record

The *Rosemond R*, ex-*Vega*, developed engine trouble during the night of August 3, 1969, and the owner, William Hovey, set an anchor that eventually snapped. Abandoning the vessel, the three crew members watched as the surf carried it onto the rocks where it was destroyed (SBNP, August 4, 1969). Stranded on Santa Rosa Island, the crew was rescued by the Coast Guard the next morning as the surf and tide subsided. The location of the wreck is given as "8 mi 070t from South Point Light Santa Rosa Island CA" (MVUS 1976:1430). This would place the wreckage somewhere near East Point. Peter Howorth has noted wreckage in this area, although recent searches have not turned up anything.

Standard Nut
1950-1969
Fishing Vessel

Gross Tonnage	14 tons
Net Tonnage	7 tons
Length	36.7 feet
Beam	12.9 feet
Depth	4.2 feet
Decks	one
Official Number	260204
Construction	wood

Historical Record

The *Standard Nut*, previously known as the *Texan*, stranded at Santa Rosa Island on September 9, 1969 (MVUS 1972).

Sierra
1944-1972
Fishing Vessel

Gross Tonnage	13 tons
Net Tonnage	6 tons
Length	34.3 feet
Beam	11.6 feet
Depth	4.0 feet
Decks	one
Official Number	262656
Construction	wood

Historical Record

This diesel-propelled vessel stranded at Smugglers Cove, Santa Cruz Island, on October 24, 1971 (MVUS 1974:1637). No

newspaper account of this incident has yet been located.

Liberty
1948-1973
Fishing Vessel

Gross Tonnage	197 tons
Net Tonnage	101 tons
Length	90 feet
Beam	25.4 feet
Depth	12 feet
Decks	---
Official Number	156332
Construction	wood

Historical Record

This vessel flooded and sank due to undetermined causes "about 20 miles south of Santa Barbara" (SBNP December 11, 1973). The Coast Guard returned the crew to Santa Barbara. The indeterminate location is well within the sanctuary, and could be within the park, probably in waters at least 40 fathoms deep.

Joan
1947-1974
Fishing Vessel

Gross Tonnage	12 tons
Net Tonnage	5 tons
Length	29.3 feet
Beam	12.3 feet
Depth	5.1 feet
Decks	one
Official Number	278028
Construction	wood

Historical Record

The *Joan* foundered on the rocks at Forney's Cove, Santa Cruz Island, on February 15, 1974 (MVUS 1976; SBNP, February 15, 1974). There were no fatalities among the three-person crew.

Frederick Q 1936-1974 Fishing Vessel

Gross Tonnage	24 tons
Net Tonnage	11 tons
Length	46.1 feet
Beam	12.8 feet
Depth	5.1 feet
Decks	one
Official Number	260183
Construction	wood

Historical Record

The *Frederick Q*, built at Portsmouth, Virginia, had previously been known as the *Nampa* and as *No. 13014 USN*. Home-ported in San Francisco and owned by Fred Tandez Quilantang, the vessel "foundered off San Miguel Island CA" on November 29, 1974 (MVUS 1976:1426).

Glady I 1944-1975 Fishing Vessel

Gross Tonnage	11 tons
Net Tonnage	8 tons
Length	38.3 feet
Beam	10.1 feet
Depth	4.5 feet
Decks	one
Official Number	262071
Construction	wood

Historical Record

The *Glady I* sank about 3 miles off Yellow Banks, Santa Cruz Island, on June 2, 1975, while after sea urchins. The vessel was formerly *LCSS C 60593 USN*. It sank suddenly, in less than a minute, leaving the three crew members in the water. The skipper, Larry Greenley, apparently became confused and did not reach the shore of Santa Cruz Island (SBNP, June 3, 1975). The vessel was described by the Coast Guard as "having seen better days." The wreckage would lie in approximately 50 fathoms of water.

Blazenka B
1974-1977
Fishing Vessel?

Gross Tonnage	26 tons
Net Tonnage	16 tons
Length	35.5 feet
Beam	14.3 feet
Depth	6.7 feet
Decks	one
Official Number	557740
Construction	wood

Historical Record

According to MVUS (1979), the *Blazenka B* burned "in Scorpio [*sic*] Harbor Santa Cruz Island Ca" on March 27, 1977. The vessel had previously been known as the *Avanti*.

Chelan
1935-1978
Fishing Vessel

Gross Tonnage	34 tons
Net Tonnage	18 tons
Length	46.8 feet
Beam	13.9 feet
Depth	5.6 feet
Decks	one
Official Number	233743
Construction	wood

Historical Record

The *Chelan* collided nearly head on with the 35,633-ton *Sansinena II* on February 26, 1978, in the shipping lanes about 2 miles off Santa Cruz Island. All crew were rescued, although the *Chelan* sank within a matter of minutes. Several other vessels were in the area at the time (VSFP, February 28, 1978).

Jana Dawn
1958-1978
Fishing Vessel

Gross Tonnage	59 tons
Net Tonnage	40 tons
Length	57.0 feet
Beam	18.3 feet
Depth	8.4 feet
Decks	one
Official Number	277143
Construction	wood

Historical Record

This vessel was destroyed in a storm at Santa Cruz Island on February 28, 1978 (MVUS 1979). The *Jana Dawn* had formerly been known as the *JM* and the *Madelyn M*. According to a newspaper article which named the boat *Jana Lee*, the vessel was destroyed at Chinese Harbor.

Sea Wanderer
?-1979
Fishing Vessel

Gross Tonnage	---
Net Tonnage	---
Length	30 feet
Beam	---
Depth	---
Decks	---
Official Number	---
Construction	---

Historical Record

This vessel sank 1.5 miles off San Pedro Point on Santa Cruz Island on August 22, 1979, leaving the four-person crew bobbing in their life jackets. A Coast Guard helicopter

rescued them within 45 minutes (VSFP, August 23, 1979). The vessel was at least 3 years old.

Patrick
1942-1980
Fishing Vessel

Gross Tonnage	18 tons
Net Tonnage	11 tons
Length	38.7 feet
Beam	10.5 feet
Depth	4.5 feet
Decks	one
Official Number	268135
Construction	steel

Historical Record

This vessel stranded "near Santa Barbara Island CA" on January 11, 1980 (MVUS 1981). It was a former Coast Guard vessel.

Summary

The remains of numerous fishing boats from San Pedro and Santa Barbara, which might be reasonably identifiable to different ethnic groups, are available for study in the Channel Islands. Only a portion of these remains have been recorded and reported in the literature, including the present study. Many fishing vessels were not formally documented and hence do not appear in sources such as *Merchant Vessels of the United States*. Moreover, fishing vessels do not possess the romantic appeal of the larger vessels, nor are their wreck scatters as conspicuous.

Interesting trends, however, appear in the still-imperfect data. From 1930 on, fishing vessels were lost with regularity to engine-room fires at sea, particularly around Anacapa and Santa Barbara islands. Santa Ana winds

also claimed the boats of unaware skippers who unwisely chose anchorages at the eastern end of the park. Fatalities occurred all too often in these incidents.

At the western end of the islands, Cuyler Harbor on San Miguel Island has seen fishing vessels wreck with regularity. The sloop *Liberty*, discussed in Chapter 8, was only the first of many to lose its anchor and fetch up on the southern lee shore of this tricky anchorage. It is worth remembering that while Cuyler Harbor offers shelter from open seas, it gives no protection from the prevailing northwest winds. Therefore, any vessel not securely anchored will end up on the beach very quickly. Our records for wrecks in this area are incomplete. Peter Howorth has photographed a piece of the wooden hull side of a vessel in Cuyler Harbor much larger than any of those noted in this report. Perhaps it drifted down from a mainland wreck.

Many shipwreck-related activities involve both shore camps on the islands and vessels plying the offshore waters. Chinese-American abalone fishing, "crawfishing," and much general fishing in the early twentieth century originated from informal fishing camps situated on the islands. Vessels supplied the camps and transported the catch to markets in Santa Barbara and San Pedro. These camps diminished as island access became restricted in the 1930s, and fishing vessels became larger as the range of the fishing fleet expanded. Smaller, faster boats have recently come into favor in the abalone and sea-urchin fisheries. Now catch boats service the smaller Radins and Wilsons that congregate overnight at popular island anchorages, in a system curiously reminiscent of the earlier island-based operations. Today's vessels emphasize low maintenance costs, trailerability, small crews, minimum accommodations, and high speed in order to pop out of harbor and work during spells of good weather in the offshore islands.

CHAPTER VIII

Other Trades and Pursuits

World War II increased the military's presence in the Channel Islands, although San Clemente Island, well to the south of the park, had been reserved for the navy as early as 1933. Every island had at least a small detachment of troops, while Santa Rosa sported a concrete gun emplacement and a small base in the interior of the island. San Miguel Island was under navy control after the war, utilized as a bombing and bombardment range. Santa Barbara Island, for a time, housed missile tracking cameras for the Pacific Missile Test Center operating out of Point Mugu. Other government agencies, such as the National Park Service and the California Fish and Game Department, have patrolled the waters around the islands more frequently in recent years. This activity has left material behind, which is briefly discussed in this chapter.

The bulk of the chapter deals with vessels such as pleasure craft and those supporting island operations. Most of these ships are not immediately different from the typical fishing vessels, but at the time of their wrecking, they were employed in other activities. A short section at the end of the chapter discusses vessels often reported to have wrecked in the

park but not indicated by primary sources to have done so.

San Buenaventura

?-1858

Sloop

Gross Tonnage	---
Net Tonnage	---
Length	---
Beam	---
Depth	---
Decks	---
Official Number	---
Construction	wood

Historical Record

The *San Francisco Alta California* repeated the following story on October 13, 1858:

Wreck and Loss of Life: On the 13th of September, the sloop *San Buenaventura*, of Santa Barbara, sailed from that port for the island of Santa Rosa, having on board Peter Hammond and Miguel Cota, as

passengers. She was under the command of Vizenzo Panatieri, alias John Brown, alias Capt. Paisoco, an Italian. When near the Island of Santa Cruz, at about 4 o'clock A.M., she sprang a leak and soon filled and sank. All who were on board succeeded in reaching the shore, which at that point is very high and precipitous. Pasatieri climbed up the steep bluff, and after wandering about the island for two days and nights, naked, hungry and thirsty, reached one of the houses on the island. The others, less fortunate, have not since been heard of. Diligent search as been made upon and around the island, but no traces have been discovered of them. It is supposed that they must have perished at the foot of the bluff, where they landed. The escape of Panatieri is little less than miraculous. The bluff rises to the height of about two hundred feet and is almost perpendicular for the first hundred feet. Hammond was an industrious and respected citizen of Santa Barbara, and leaves a wife and five children of tender age. Miguel Cota was a native Californian, and a citizen of this place [*Santa Barbara Gazette*].

This account suggests that the vessel sank relatively close to Santa Cruz Island, probably within the park, since all three individuals were able to swim ashore. Remains of the vessel are likely to lie in relatively deep water.

Undine
1890-1892
Trade Not Known

Gross Tonnage	15.56 tons
Net Tonnage	14.80 tons
Length	42.0 feet
Beam	15.0
Depth	5.5
Decks	one
Official Number	25277
Construction	wood

Historical Record

The first license for this vessel was issued on November 5, 1890. Exactly a month later, the steamer *Santa Cruz* spotted the floating wreckage of the *Undine*.

...with one man clinging thereto. Threw a line which he was unable to catch. Backed off and lowered a boat. When they pulled to wreck, no man there. *Santa Cruz* then steamed to Ventura, leaving wreck at sea. Next day wreck was towed by me into 120 fathoms of water where she sank [Geo. F. Ellis, sole owner].

The *Undine* had not yet received an official number. The crew of three, J. N. Loyd [*sic*], Fred Fowler, and C. Vasques, are listed as lost on the wreck report which also attributed the wreck to a "supposed collision—colliding unknown vessel." This vessel is presumably the one mentioned in the

newspaper account of the wreck of the *Helene* as "*Andine*."

Fishhook

?-1893

Trade Not Known

This vessel is also mentioned in the *Helene* article, with no details whatever of the event. The name suggests the vessel was engaged in fishing.

Liberty

1876-1895

Supply Sloop for San Miguel Island

Gross Tonnage	13.41 tons
Net Tonnage	12.74 tons
Length	34.6 feet
Beam	13.8 feet
Depth	4.1 feet
Decks	one
Official Number	140174
Construction	wood

Historical Record

Numerous short entries in the *Santa Barbara Morning Press* indicate a busy life for the *Liberty*, carrying supplies to San Miguel and returning with wool and sheep. One particularly rough trip from Santa Barbara began with calm winds that required the vessel to take two days to work west along the coast to El Capitan. The northwesterlies picked up on the third day, increasing so violently that when the boat had almost reached the island, waves swept overboard a member of the crew, an Indian named Augustine Ybarra. Although the crew threw an oar to him, they could not save him. Forced to take shelter at Johnson's Lee on Santa Rosa Island, the *Liberty* finally reached San Miguel Island a day later (SBMP,

June 14, 1891). The bare possibility that Ybarra might have reached Santa Rosa Island alive was squashed when the *Santa Rosa* returned from Becher's Bay with no report of the lost crewman (SBMP, June 18, 1891).

The *Liberty* may have sunk as a result of the Cuyler Harbor landslide of 1895 (Johnson 1972:287). A wave generated by the sudden subsidence of a portion of the shoreline into the harbor wrenched the *Liberty* from the double anchors sometime during the evening of March 28.

Her crew discovered her pounding in pieces on the southeast shore of the harbor. Fragments of the vessel strewn the beach for half a mile but her frame was still intact. A careful inspection revealed the curious fact that her bow had been stove in as if the boat had received a sharp blow from beneath the water and her mainmast lay amidships along her deck pointing sternwards. The anchor chains were wound around her keel as if the sloop had been rolled over and over and the anchors were but fifteen feet away, half buried in the sand. The wreck was found three quarters of a mile from the place where the vessel had been anchored [LAT, April 9, 1895].

The chart for Cuyler Harbor, 1930 edition, bears the notation "surveyed from 1858 to 1896" (Figure 8.1) and clearly shows a slump area due west of the anchorage and an extensive area of projecting beach that is no longer present. This represents the location of the 1895 landslide (Figure 8.2), which must have created a very large wave proceeding out from a lee shore to the anchored vessel. An area just 250 yards north of this landslide let

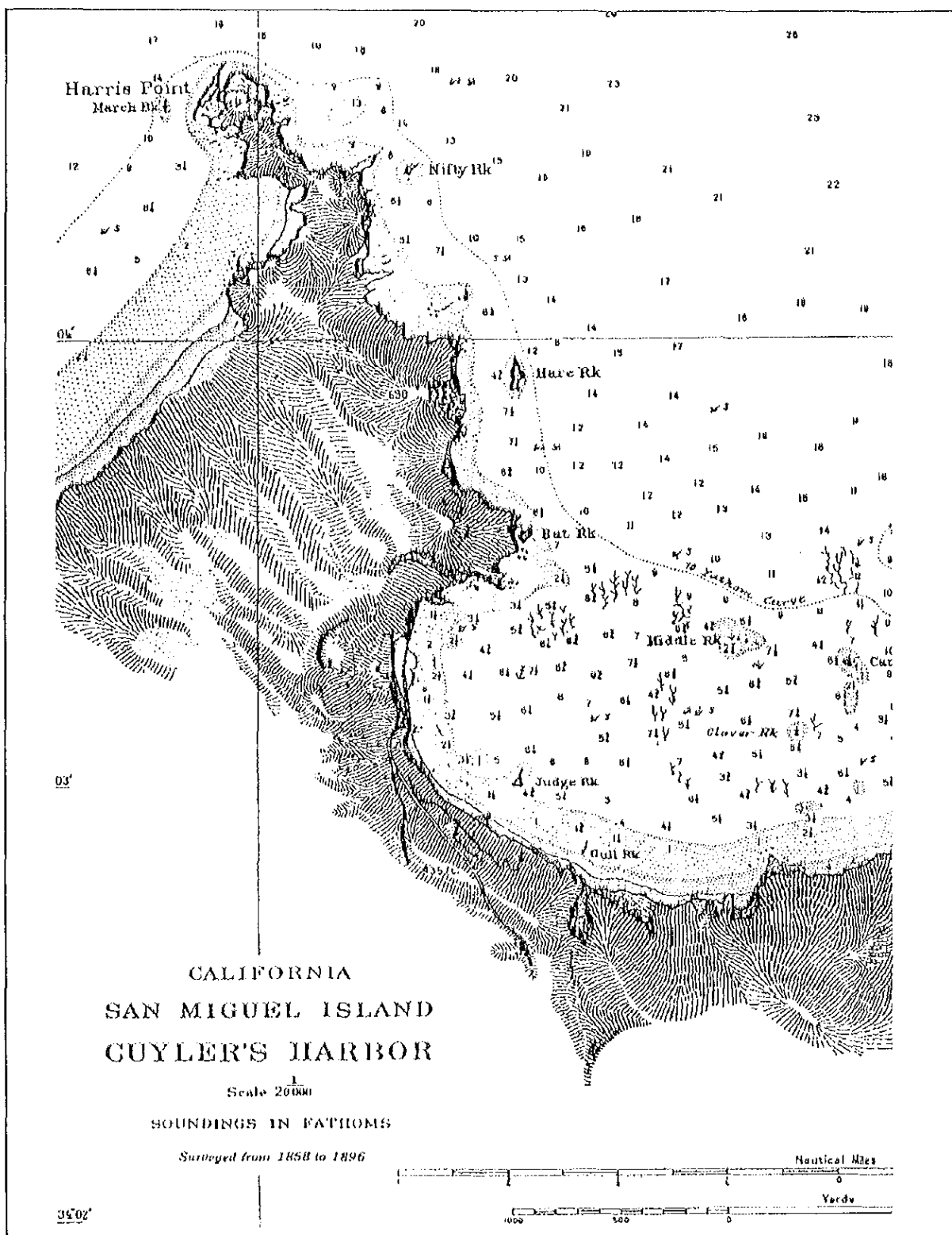


Figure 8.1. Cuyler's Harbor, 1858 to 1896.

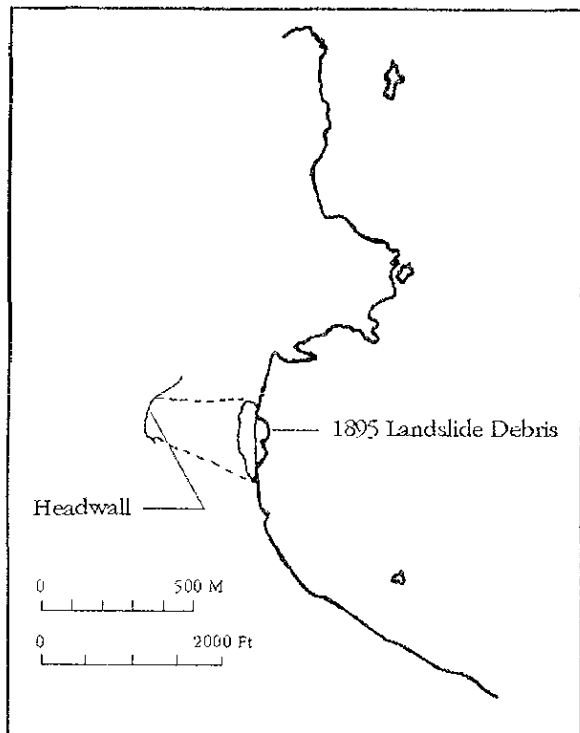


Figure 8.2. 1895 landslide debris.

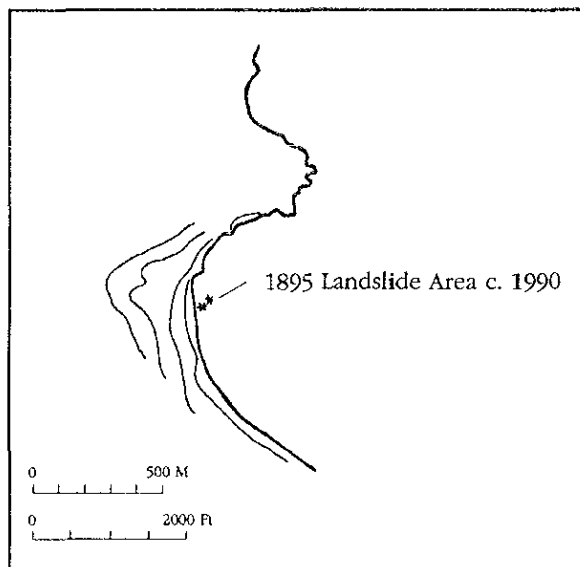


Figure 8.3. 1895 landslide area, ca. 1990.

go in the 1940s, generating a landslide slump scar that is vividly evident today (Figure 8.3). A submerged boulder field supporting a beautiful kelp bed represents the residue of the 1895 landslide.

The landslide story may have been concocted to cover a bad job of anchoring, but the *Liberty* is the first vessel known definitely to have wrecked in Cuyler Harbor. Although destroyed by a most unusual natural occurrence, the vessel evidently came to rest in a location along the southeast shore of the anchorage that it would share with many other vessels over the years.

Chappo
1897-1897
Trade Not Known

Gross Tonnage	5.67 tons
Net Tonnage	---
Length	20.3 feet
Beam	10.2 feet
Depth	3.1 feet
Decks	one
Official Number	127191
Construction	wood

Historical Record

The sloop *Chappo* went ashore at China Harbor, Santa Cruz Island, when the vessel's anchor chain broke during northwest winds and seas on August 15, 1897. The crew of four reached shore with no loss of life. William Bates built the vessel in Santa Barbara.

Helene
1895-1898
Sloop; Guano Carrier

Gross Tonnage	15.31 tons
Net Tonnage	15.31 tons
Length	34.2 feet
Beam	12.3 feet
Depth	4.0 feet
Decks	one
Official Number	96325
Construction	wood

Historical Record

The *Santa Barbara Morning Press* of December 13, 1898, reported:

The Yacht *Helene* a Total Wreck

Sent Ashore in Forney's Cove, on
Santa Cruz

Result of Last Week's Wind

The yacht *Helene*, built a few years ago by J D Axtell, and owned by Edwards and Company, is a total wreck in Forney's Cove, on Santa Cruz Island. Captain Ramon Vasquez, who was in command, is seriously ill at his home on lower De La Vina street, the result of the drenching received in escaping to the shore, and the exposure in the cold during the following day and night. The rest of the party escaped with their lives and clothes on their backs, but nothing more.

The *Helene* had been collecting guano at San Miguel Island and sailed from there on December 8, 1898. A strong northeaster came up and the vessel "moved to an anchorage in the NE harbor of the cove." The wreck report states that the *Helene* was carrying 2 tons of guano when the vessel was beset by a "strong gale, rough sea, dark night" that resulted in parting of the anchor chain. The vessel drifted into breakers, stranding on a little rock where the crew spent the night. The next morning the crew crossed to Santa Cruz Island and broke into a Chinese camp. Later, Captain Burtis of the schooner *Santa Rosa* returned the crew to Santa Barbara.

The newspaper article goes on to mention the involvement of Rosaline (*sic*) Vasquez in two previous wrecks on the islands, the *Andine* (1892) and the *Fishhook* (1893). *Andine* is probably *Undine* which actually wrecked in 1890, but perhaps there is another wreck of *Andine*. If so, how did he survive?

Magic

1889-1899

Two-masted Gasoline Schooner, Lobster
Camp Support Boat

Gross Tonnage	24.3 tons
Net Tonnage	23.08 tons
Length	46.3 feet
Beam	13.2 feet
Depth	3.8 feet
Decks	one
Official Number	141068
Construction	wood

Historical Record

The steam schooner *Magic*, formerly known as the *Lizzie Belle W*, delivered lobsters from the islands to a small cannery in San Pedro. Its demise off the east coast of Santa Rosa Island was covered in a series of articles in the local newspapers.

The Catalina Conserving Company's schooner the *Magic*, Capt O'Brien, is lying a wreck in the rocky channel between Santa Cruz and Santa Rosa islands. The schooner *Santa Rosa* arrived today bringing over Edward Duffy, engineer of the lost vessel, and two of her crew, one a boy. Duffy and his companions had an exciting experience during the accident. Duffy was below at the engine when signaled

by the captain to stop the ship. He did so, and was signaled his relief when some one shouted down the hatch, "For God's sake, start her up or we will be upon the rocks." The captain also signaled to go ahead, but in a moment, a terrible shock threw the engineer over his engine, and the next minute a rolling lurch threw him violently against the wall.

Running on deck, the engineer saw the captain and crew, save one man, making away from the ship. The schooner had three skiffs and a boat in tow, and the men had cut loose in these. Every instant the engineer expected a blow up, but his companions, seizing an old Mauser rifle near by, loaded it, and pointing it at the captain, ordered him to return. The men were taken off and later the boat which got off the rock went down in twenty feet of water. The accident means a delay to the crawfish cannery here [LAT, August 24, 1899].

The schooner *Santa Rosa* brought the crew back to Santa Barbara (wreck report). The loss of the schooner caused repercussions at the cannery:

The loss of the schooner *Magic* which went on the rocks last week and now lies at the bottom of the channel of the islands, has thrown the crawfish cannery back a week, and left a large number of people out of employment for that length of time. The sloop *Restless* of this port has been chartered by the owners of the cannery to bring crawfish from the Channel Islands and will arrive with the first cargo of the

season in a few days [LAT, August 28, 1899].

A short article in the *Santa Barbara News Press* of October 11, 1949, a column entitled "Fifty Years Ago—11 Oct 1899," provides information on the demise of the *Magic*.

The schooner *Santa Rosa* arrived from the scene of the gasoline schooner wreck near Santa Rosa Island and reports that a thorough inspection reveals that the keel is gone in part, including the iron shoe, two plank butts are started, and the rudder post is broken. The machinery is in good condition, and the 22 horse power engine is not injured in the least. The schooner *Magic* lies in a convenient position in a little bay, with a sandy bottom, and will be offered for sale as she lays. The mainsail, boom mainsail, boom and gaff, and the foresail, boom and gaff were brought to port in Santa Barbara and will go with the *Magic* in case she is sold.

Finally, the *Los Angeles Times* September 15, 1899, reported:

Marine Insurance Inspector L. H. Turner and party of wreckers arrived today from the scene of the wrecked schooner *Magic* at Rancho Viejo Bay, Santa Rosa Island, and report that it will be impossible to raise the *Magic*. Her entire keel has been carried away. The *Magic* ran ashore under what were considered suspicious circumstances some time ago, and the insurance men have been investigating the matter. She will be sold as she lies for her machinery and old iron,

and wreckers will begin to tear her to
pieces immediately.

The series of articles leaves the impression
that wreckers salvaged the vessel thoroughly.
No wreckage has been located that might
correspond to the description of this vessel.
The vessel should lie along the coast between
Skunk Point and East Point, near the
freshwater lagoon.

Santa Rosa

1879-1899

Island Support Schooner

Gross Tonnage	30.99 tons
Net Tonnage	29.45 tons
Length	61.2 feet
Beam	17.5 feet
Depth	6.5 feet
Decks	one
Official Number	115660
Construction	wood

Historical Record

The schooner *Santa Rosa* stranded in
Cuyler Harbor, San Miguel Island, at 4:00
A.M. on November 24, 1899, pushed onto the
beach by high seas. The wreck report
specifically stated that winds were light. The
crew had run out the kedge anchor to move
the vessel ahead when breaking seas
interfered. Dropping the bow anchor did not
prevent the vessel from stranding. The vessel
probably came to rest on the south side of the
harbor.

Dawn

1883-1901

Gasoline Schooner Supporting Island
Lobster Camps

Gross Tonnage	16.59 tons
Net Tonnage	15.76 tons
Length	34.8 feet
Beam	14.1 feet
Depth	5.1 feet
Decks	one
Official Number	157169
Construction	wood

Historical Record

Things were not going well for the
Catalina Conserving Company. About 18
months after the loss of the *Magic*, the
company lost the *Dawn*, engaged in the same
trade.

The Dawn Wrecked

Went to Pieces on Anacapa Rocks

The Vessel Was One Known Well Here

News reached here yesterday from
Hueneme of the total wreck of the
gasoline schooner *Dawn*, formerly of
this port. She went ashore on
Saturday night in a strong northeast
gale on the rocks of the harbor of
Anacapa Island.

The vessel was a large one and was well known at the time of the running of the Catalina Conserving Company cannery here. She plied between this port and the islands in the crawfish trade for several months. The crew was saved in the wreck. The 12-horse gasoline engine was also saved. The captain, Olsen, and his crew rowed across the channel from the islands and landed at Hueneme last Wednesday evening [SBDP, February 15, 1901].

The wreck report corroborates the details presented in the newspaper account. The account suggests that this vessel wrecked at Frenchy's Cove.

Francine
1895-1901

Two-masted Gasoline Schooner

Gross Tonnage	15.75 tons
Net Tonnage	15 tons
Length	48.0 feet
Beam	12.0 feet
Depth	4.5 feet
Decks	one
Official Number	120988
Construction	wood

Historical Record

This vessel was built at New Westminster, British Columbia, as the *Lottie* in 1884 and was rebuilt at Astoria, Oregon, in 1895. The *Francine* was registered at San Francisco and engaged in the coastal trade until 1901, when the vessel moved to San Diego. At this time, the gross tonnage was given as 14 tons and the net tonnage as 10. On June 26, 1901, its certificate of registry was surrendered with the

notation "Total Wreck." The *Francine* carried 196 sacks of guano, about 2 tons, apparently obtained at San Miguel Island, on its final voyage. A local paper recorded the event:

On Saturday afternoon the gasoline schooner *Francine*, Capt. Tuerone, sprung a leak while between Santa Rosa and Santa Cruz Islands. The little vessel attempted to reach shoal water near Gull Island, but could not in the face of the heavy sea that was running. The crew took to the boats and landed on Gull Island, and afterward rowed to Santa Cruz and were brought to town by Capt. Maggiolo yesterday afternoon. The lost schooner was valued at about \$3,600 [SBMP, June 12, 1901].

Shasta
1906

Steam Schooner

Gross Tonnage	722 tons
Net Tonnage	473 tons
Length	199.6 feet
Beam	37.8 feet
Depth	14.2 feet
Decks	----
Official Number	200714
Construction	wood

This vessel wrecked at Point Conception, but a significant portion of the vessel reached the park.

The wreckage of the *Shasta*, which went to pieces near Point Conception several weeks ago, is still in evidence, the greater part of the pilot house of the ill-fated schooner being now

stranded on Bee Rock, on the south side of Santa Rosa Island [SBMP, November 3, 1906].

A search of Bee Rock for remains of the *Dora Bluhm* yielded no evidence of this vessel. Its remains may be commingled on Cluster Point with the earlier wreckage of the lumber schooner.

Sea Foam
Approximately 1907
Trade Not Known

The only record of this vessel comes from the following newspaper article:

Captain Waters who returned from the islands last Friday reports that he found a large piece of wreckage on the north side of San Miguel Island. Upon the boards the words "*Sea Foam*" were painted in gilt letters six or seven inches long. Capt. Waters has brought the relic over with him in the hopes that some clue may be found in this mystery of the deep [SBMP, March 17, 1907].

A vessel of this name did wreck at Westport, Mendocino County, California, on October 1, 1885, when capsized by large breakers while moored. Since this vessel wrecked earlier and up current from San Miguel Island, it may have provided the item found by Captain Waters. Another possible source is a ship also named *Sea Foam* that collided with the *Del Norte* off the Coquille River, Oregon, in 1905. This wreckage would have traveled a longer distance in a shorter time.

Irene
1905-1908
Miscellaneous Trades

Gross Tonnage	---
Net Tonnage	---
Length	35 feet
Beam	---
Depth	---
Decks	one
Official Number	---
Construction	wood

Historical Record

This vessel is discussed in Eaton (1980). Ira Eaton built the *Irene*, working evenings and weekends, and named it after his first child. The *Irene* was "out all day trolling for bonita and yellowtail for the local market" (SBMP, February 16, 1907). The vessel wrecked in Valdez Harbor, Santa Cruz Island, during a northwester early in 1908 (Eaton 1980:31). Thanks to Eaton's fine account, we know of this vessel, certainly one of many that worked in the area but that were not formally documented and registered and whose histories are not reflected in official records. No listing exists for this vessel in *Merchant Vessels of the United States*.

Nellie
1879-1912
Local Passenger Vessel

Gross Tonnage	14 tons
Net Tonnage	9 tons
Length	38.8 feet
Beam	11.0 feet
Depth	3.7 feet
Decks	one
Official Number	130865
Construction	wood

Historical Record

The *Nellie* wrecked at Santa Cruz Island on December 25, 1912, in a Santa Ana, according to a wreck report signed by Dan Bethune, captain of the vessel. This document gives the official number of the vessel as 130865. A story in the *Los Angeles Times* of January 3, 1913, agrees in all particulars except for the date of the wreck:

Santa Barbara, Jan.—Telling a story of great suffering and danger, Capt. Dan Bethune and Mate Fisher, of the power vessel *Nellie*, of San Pedro, which was dashed to pieces on the rocks on the east end of Santa Cruz Island were brought here today by a party of fishermen who rescued them.

Capt Bethune told of having encountered a northeast gale New Year's Eve which drove their small craft upon the rocks. When the vessel struck, they jumped overboard and battled heavy seas until they reached shore. Exhausted, they fell upon the rocks where they remained all night. They passed New Year's Day in watching and signalling for help. The fishermen who rescued them put out from Santa Barbara this morning and passed near enough to Santa Cruz Island, twenty miles across the channel, to see the signals of distress.

The *Nellie* was listed as a passenger vessel, built in either 1879 (MVUS 1914), 1887 (Wreck Report), or 1900 (MVUS 1910). The MVUS for 1914 lists the wreck of the sloop *Nellie* on December 25, 1912, and gives the official number for this vessel as 209731,

which apparently is an error. Documentation for 130865 exists, and it is clearly the same, or a very similar, vessel (MVUS 1910, 1911). The other documents describe the *Nellie* as powered by a gas engine.

International I 1918-1918 Barge

Gross Tonnage	72 tons
Net Tonnage	72 tons
Length	70.0 feet
Beam	30.0 feet
Depth	3.5 feet
Decks	one
Official Number	167316
Construction	wood

Historical Record

All the information currently available on this vessel comes from the 1919 and 1920 editions of *Merchant Vessels of the United States* and its certificates of enrollment in the National Archives. The vessel was owned by the International Packing Corporation, and its first license was issued on July 18, 1918. The wreck report states that *International I*, carrying a crew of five, stranded at Smuggler Cove, Santa Cruz Island, a result of a southeast swell and a 40 mile an hour gale on September 13 of the same year. The 1920 MVUS gives 1916 as the construction year for the vessel, while the 1919 MVUS gives the year as 1918. This latter date is probably correct, since the vessel is not listed in the 1918 MVUS. Constructed in East San Pedro, *International I*'s home port was Los Angeles. No account of the wreck is available from local newspapers, probably because of security restrictions relating to World War I.

H. T. P. Co. IX

1916-1921

Local Freighter

Gross Tonnage	12 tons
Net Tonnage	8 tons
Length	45.8 feet
Beam	10.2 feet
Depth	4.8 feet
Decks	one
Official Number	214093
Construction	wood

Historical Record

This vessel, built in East San Pedro, was owned by the Halfhill Tuna Packing Company of Long Beach. Licensed in the coasting trade, the vessel burned "off Santa Barbara Island, Calif." on January 30, 1921 (MVUS 1921). No newspaper account has been located to give further details, but the final license gives the location as "four miles off Santa Barbara Island, Cal 1/30/21 2 persons on board, no lives lost."

Lotus

1901-1921

Steam Schooner

Gross Tonnage	114 tons
Net Tonnage	78 tons
Length	104 feet
Beam	20 feet
Depth	5.7 feet
Decks	---
Official Number	141742 (141723-MVUS 1922)
Construction	wood

Historical Record

While en route to San Diego to enter into passenger service, the steam schooner *Lotus* burned off Port Hueneme the evening of September 15, 1921, apparently well away from the park and sanctuary (LAT, September 16, 1921). The wreck report gives the location as "off Anacapa Island" and the vessel is included here as possibly being within the sanctuary.

Wampas (A-1370) aka Grey Ghost

?-1926

Rum Runner

Gross Tonnage	9 tons
Net Tonnage	---
Length	56 feet
Beam	11 feet
Depth	---
Decks	one
Official Number	---
Construction	---

Historical Record

At 10:30 a.m., November 13, the CG-254, Boatswain (T) L. H. Williams, Officer-in-charge, while on patrol off Cochies {sic} Prietos, Santa Cruz Island, sighted the fast motor-boat "A-1370", powered with two 300 hp Sterling engines and known as the "GREY GHOST." This boat was about 1600 yards distant when sighted and the CG-254 gave chase at once, firing one bland one-pounder and two service charges across her bow. The

"A-1370" failed to heave-to and it was then apparent to the Officer-in-charge, CG-254, that she was loaded with contraband and endeavoring to escape. The Officer-in-charge fired 59 rounds of one-pounders making six direct hits, one through her pilot house and another at her starboard waterline, doing considerable damage and partially disabling the "A-1370." At the same time, Mo.M.M.2c Edward O. Caliouette manned the machine gun from the top of the pilot-house, expending ten magazines and making numerous hits. The "A-1370" was now disabled to such an extent that it headed for the Island to avoid sinking and was run ashore at 10:50 a.m. on a rocky beach about one and one-half miles east of Valley Anchorage, Santa Cruz Island.

The Officer-in-charge, CG-254, immediately lowered the dinghy and boarded the rum-runner. A moderate surf was running at the time and the rum-runner was swamped and partially submerged. It was ascertained that the "A-1370" was loaded with approximately two hundred (200) sacks of imported whiskey, two of which were removed and placed aboard the CG-254 for evidence of violation of Section 593-A, Tariff Act of 1922. Near the wreck, two oak half-barrels (about twenty gallons each) of liquor were found floating and they were also placed aboard the CG-254.

The CG-254 then reported the seizure to the base by radio-telephone and requested the assistance of another patrol boat with a dory, a dory being

more suitable for unloading the beached rum-runner. The CG-254, while standing by the rum-runner for four hours, endeavored to unload or two off the beached vessel from the rocks but this could not be accomplished.

Up to this time no person had been sighted on the "A-1370" and it was presumed that the operator of same had escaped ashore at the time she was beached and accordingly parties were sent out by the CG-254 to capture him. The first two parties found no trace of anyone, but the third party, consisting of Mo.M.M.2c Edward O. Caliouette, found a man hidden between some boulders about thirty yards from the "A-1370" and brought him aboard the CG-254 at 2:30 p.m..... His clothing being still wet from the surf and the fact that he was hiding led the Officer-in-charge to believe that he was the operator of the "A-1370" and he was accordingly arrested as such.

At 12:30 p.m., 13 November, the CG-259 was sent from the Base to assist the CG-254. The CG-259 arrived at the scene of the seizure at 11:30 p.m. to return to the Base. A heavy surf prevented the CG-259 from doing any work toward saving the cargo of the seized rum-runner that night, but the following morning, at 6:30 a.m., they began to unload the liquor from the "A-1370" in a heavy

surf. While working on the rum-runner the men were several times washed overboard by the surf, the boat being two-thirds under water. At 3:00 p.m., fifty (50) sacks of liquor had been recovered and the CG-259 found no more. The CG-259 left the scene of the seizure at 3:30 a.m., November 15, to return to the Base.

A later report stated that the *Grey Ghost* "is a total loss, no part of the engines or equipment being salvaged." Clearly there was a less benevolent side to Coast Guard operations during the "Roaring Twenties."

W. T. and B. Co. No. 60
1914-1931
Motor Barge

Gross Tonnage	738 tons
Net Tonnage	650 tons
Length	142.1 feet
Beam	37.2 feet
Depth	16.2 feet
Decks	one
Official Number	166821
Construction	wood

History

This vessel burned at 34° 20' N, 120° 15' W, in March 1931. This location is between Point Conception and Santa Barbara, slightly north of the shipping lanes. The Coast Guard cutter *Tamaroa* towed the hulk to a location west of East Point, Santa Rosa Island, and there sank the wreckage using mines, in much the same manner in which this same cutter had dealt with the wreckage of the *Jane L. Stanford*

(*Tamaroa* logbook). Wreckage has been reported in this area by Carmen Lombardo and an archeological survey crew which noted the presence of a massive deck cleat, far too large for the typical fishing vessel.

Typhoon
?-1931
Pleasure Yacht

Specifications unknown.

Historical Record

Nothing is known of the specifics of this vessel, as most information derives from newspaper accounts. The vessel is not listed in the yacht section of *Merchant Vessels of the United States*, 1930 edition.

The *Typhoon* was abandoned by its four-person crew (Mr. and Mrs. Frank C. Learned, J. E. Knowles, and Elizabeth Bakewell) at 3:00 A.M., June 28, 1931. The vessel was still floating north of Santa Cruz Island, out of gas and with torn sails, after "the anchor was dragged more than a mile in a southerly direction." This is not unexpected since the water in this region uniformly exceeds a depth of 40 fathoms, far too deep for the typical anchor rode.

The four reached the north shore of Santa Cruz Island near Platt's Harbor and waited for 12 hours. Knowles and Bakewell narrowly escaped drowning. They were rescued by the express cruiser *Haida*, owned by Max Fleischmann. The article gives no good idea of exactly where the *Typhoon* sank, strongly suggesting that the yacht was still floating when abandoned near the islands (LAT, June 29, 1931).

Zingara
1920-1931
Yacht

Gross Tonnage	23 tons
Net Tonnage	11 tons
Length	52.0 feet
Beam	14.6 feet
Depth	6.5 feet
Decks	one
Official Number	219887
Construction	wood

Historical Record

While owned by W. H. Yule, the *Zingara* had crossed the Atlantic twice to visit Europe. Four months after Frank Conroy purchased the vessel, it caught fire and exploded "30 miles off the Santa Monica coast" (SBMP, November 12, 1931) or "off Anacapa Island" (MVUS 1931). Conroy stated the accident was "just bad luck"; he intended to buy another craft in the spring. The crew of two were saved by a navy boat. Described as a "Gloucester schooner" (SBMP, November 15, 1931), the vessel was built in Thomaston, Maine. According to MVUS (1930), the *Zingara* was powered by a gasoline engine.

Swan
1931-1932
Diesel Yacht

Gross Tonnage	20 tons
Net Tonnage	16 tons
Length	42.5 feet
Beam	11.9 feet
Depth	5.4 feet
Decks	one
Official Number	230938
Construction	wood

Historical Record

The *Swan* was licensed as a yacht on June 22, 1931, owned by "Newhouse Incorporated, Ltd" of Long Beach. C. H. Newhouse was listed as master. According to MVUS (1933), the *Swan* burned at Santa Cruz Island on October 17, 1932, with three on board. The license for the vessel gives the wreck date as October 12, 1932, and specifies Frys Harbor as the anchorage. The crew was rescued by a nearby fishing vessel, the A-115.

Bar-bee

Dates Unknown

Prohibition Era Rum Runner(?)

Historical Record

According to local tradition, this vessel probably resides in deep water near Cat Rock, West Anacapa Island. Attempts to find it have been unsuccessful so far.

Kinkajou
1930s
Yacht

The information on this vessel was graciously volunteered by Henry Kilgraff Workman, Jr.:

Kinkajou ... drifted onto the rocks one night at Pelican Cove, Santa Cruz Island. Evidently the crew had a bit too much to drink, and the wind came up in the middle of the night. *Kinkajou* was owned by Donald Douglas, founder of Douglas Aircraft Company. My grandfather sailed frequently with Mr. Douglas, and was on board when this occurred. He and

the rest of the crew had plenty of time to abandon ship and take some provisions. They spent a week with shepherders (who lived on hill in picture) before flagging down a fishing boat for a ride back to the mainland.

Existing photographs show a graceful two masted schooner, about 65 feet in length, with an overhanging stern, and a round bow.

W. T. Co. No. 3
1922-1935
Barge

Gross Tonnage	264 tons
Net Tonnage	264 tons
Length	95.6 feet
Beam	34.4 feet
Depth	9.7 feet
Decks	one
Official Number	171619
Construction	wood

Historical Record

This vessel, the property of Wilmington Transportation Company, sank somewhere "between Long Beach . . . and San Miguel Island" (MVUS 1936). The date of the loss is July 25, 1935. This is evidently the incident reported as the loss of the Wrigley barge no. 3 as while filming scenes for *Mutiny on the Bounty* off of Point Bennett, San Miguel Island.

"The flat-bottomed vessel was being towed back to anchorage [Adams Cove] after the day's work when it heel over before a sudden blast of wind." The barge foundered, throwing about seventy-five members of the crew into the water. Glenn Strong, an assistant cameraman, drowned while

attempting to retrieve a camera mounted on the vessel's superstructure (*Long Beach Press Telegram*, 26 and 27 July 1935). The Coast Guard Cutter *Hermes* found only floating debris, some of which washed up on the island.

The sinking of this barge offers an explanation for the sighting of a "Spanish cannon" on the beach by William B. Harper in 1954. The movie set was the deck of the *HMS Pandora*, which features several muzzle loading cannon. While authentic cannon do not float very well, and are unlikely to wash up on the beach, the same is not true of their movie counterparts, which are often made of wood. The cannon, or prop, has not yet been located.

City of Sausalito
1936-1941
Miscellaneous Trades

Gross Tonnage	133.58 tons
Net Tonnage	72 tons
Length	78.7 feet
Beam	22.6 feet
Depth	10.9 feet
Decks	one
Official Number	235380
Construction	wood

Historical Record

This vessel was licensed for the coastal trade and mackerel fishery. Information about it is difficult to find. Shipwreck events evidently were not reported after the beginning of World War II in *Merchant Vessels of the United States*. The final license for the vessel states "vessel burned and exploded Dec. 11, 1941 at San Pedro Point,

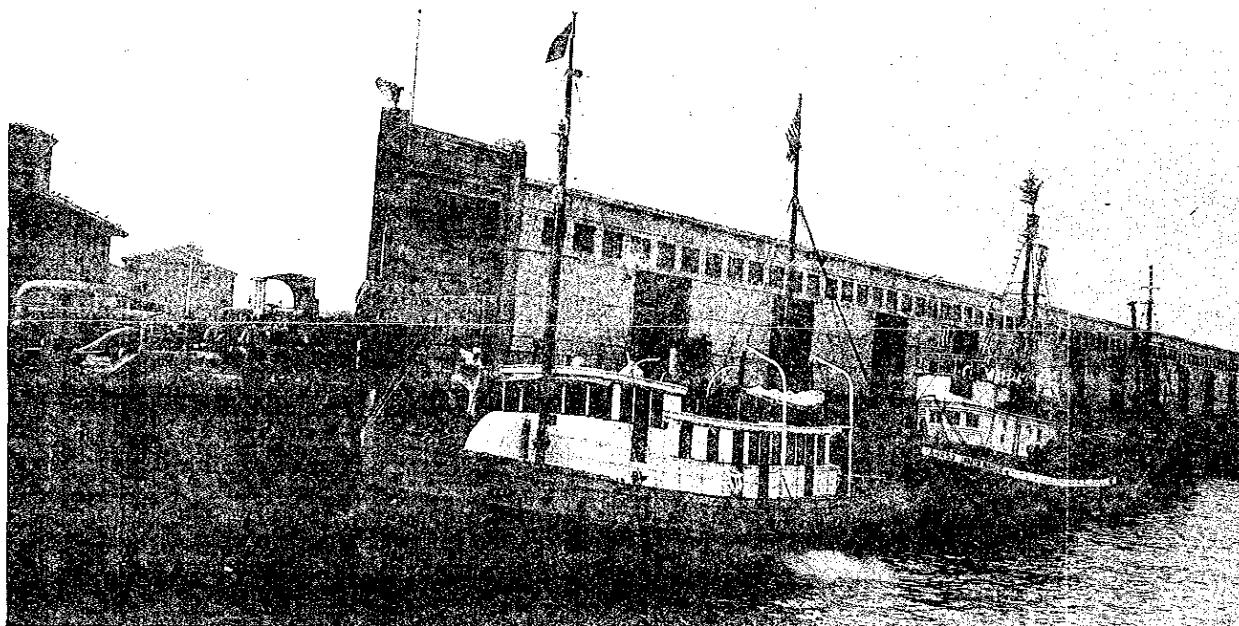


Figure 8.4. *Blue Fin* at dock 45, San Francisco, January 3, 1936. Photo courtesy of San Francisco Maritime NHP.

Santa Cruz Island, Calif; 11 on board, none lost."

Blue Fin

1930-1944

California Fish and Game Patrol Boat

Gross Tonnage	83 tons, later 94.5
Net Tonnage	43 tons, later 64
Length	81.5 feet
Beam	18.7 feet
Depth	9.6 feet
Decks	one
Official Number	229764
Construction	wood

Historical Record

The *Blue Fin* a Fish and Game patrol boat, stranded on Santa Rosa Island on September 3, 1944, while under bareboat charter to the U.S.

Army. This suggests that the vessel might lie somewhere in Becher's Bay which was the usual destination for supply boats for the Army base on the island at that time. While in the Army, the vessel was designated J 245. A 200 hp Atlas Imperial diesel engine propelled the craft. No newspaper account has been located of this wreck, which was probably censored for security reasons (Figure 8.4).

Grumman Avenger (Airplane)

Probably WW II Era

WW II Torpedo Bomber

This plane lies generally north of the gap between East and Middle Anacapa Island at a depth of 120 feet. Although well known among avid local divers around the park, the NPS did not locate it until recently, despite sporadic searches extending over the last several years. Bill Miller and Bill Fox, of

Ventura College, graciously provided the guidance which finally put Park Service divers on the wreckage in October 1995.

The history of this specific plane is not yet known, but Avengers were the most common torpedo bombers of World War II, first fighting in 1942 at the battle of Midway. Grumman Aircraft Corporation developed and built many planes, designated as TBFs. Eastern Aircraft, under a license from Grumman, built most of these planes. They carried the designation TBM, and can be distinguished from TBFs only on the basis of their Bureau numbers. On the basis of the wing length and the location and configuration of the radio antenna mast on top of the canopy, the Anacapa plane appears to be a TBF (or TBM)-1C, a version produced in the last half of 1943.

Some Avengers continued in service through 1954, although most of these were the TBM-3, a model with slightly shorter wings and a more powerful engine. Versions of the TBM-3 were developed for carrier delivery of cargo and crew and for antisubmarine Avengers, like the Grumman Guardian, were configured as "killer," (TBM-3S) and "hunter" (TBM-3W) versions. The TBM-3W carried a suspended radome and auxiliary tail fins. Some Avengers saw civilian service as fire bombers.

The wings and fuselage are largely intact, with much of the canopy remaining in place. The radial engine has broken from the frame and is partially buried in the sand bottom which surrounds the site. The upper portion of the rudder has collapsed and the right tail plane is missing. There is a large hole on the right side of the fuselage, near a hatch which opened into the rear crew compartment.

While Miller and Fox stated that when they first saw the aircraft in the early 1960s, it still retained the rear machine gun. Such tempting artifacts are now missing. All equipment inside the cockpit is also gone. The canopy around the pilot's compartment is still intact except for the hatch.

Seaborn
1918-1951
Tug

Gross Tonnage	36 tons
Net Tonnage	24 tons
Length	59.8 feet
Beam	16.8 feet
Depth	6.6 feet
Decks	one
Official Number	259656
Construction	wood

Historical Record

This vessel collided with the *Seafighter* on September 2, 1951, "in Santa Barbara Channel" (MVUS 1952:958). This may be the vessel listed as the *Seahoph* in some shipwreck lists. The owner was a John K. Seaborn, of San Francisco. Although listed in MVUS as a tug, a newspaper article describes the *Seaborn* as a yacht. The *Seaborn* survived but his two children drowned as the vessel quickly sank. The accident occurred either six miles south of Santa Cruz Island or three miles northwest of Anacapa Island at 1:30 in the morning.

The *Seaborn*, built for the Navy, had been known previously as YLT-89, YT-89, and YMT-4.

Billcona
1943-1952
Tug and Barge

Gross Tonnage	71 tons
Net Tonnage	26 tons
Length	66.9 feet
Beam	17.6 feet
Depth	8.7 feet
Decks	one
Official Number	251907
Construction	wood

Historical Record

The *Santa Barbara News Press* reported the grounding of the tug *Billcona*, originally a U.S. Army vessel known as *ST-399*, and a cattle-laden barge at Morse Point, Santa Cruz Island, in the early morning of June 23, 1952. The vessel was reported to be sinking. A story the next day reported an unusual maritime roundup:

Seven Coast Guardsmen from Santa Barbara turned sea-going cowboys yesterday to help get about 300 grass-fat cattle from Santa Rosa Island to safety after the barge on which they were being hauled ran aground at More's [*sic*] Point on Santa Cruz Island.

Only four out of the 300 cattle being taken to Port Hueneme were drowned when the barge and the tug *Bilcona* [*sic*] ran aground.

The discharge door on the barge faced the ocean and, as the cattle were shoved off the vessel and into the

water in attempts to save the craft from sinking, some of the cattle headed for the sea.

From about 7:15 a.m. until about noon, Chief Thomas J. Naccarato and his crew of Coast Guardsmen from Santa Barbara became sea-going cowboys, herding the swimming cattle, trying to head them off from the open water. Some of the steers had to be roped from a dinghy launched from the Coast Guard cutter. Two had to be towed ashore, bodily, after they refused to swim to safety.

The cattle were loaded aboard the barge at Becher's Bay on Santa Rosa Island, bound for Hueneme and towed by the tug. After the vessels ran aground, the tug *Racona* from Long Beach was rushed to the scene. The barge [*sic*] was towed to the lee side of Santa Cruz Island and was still afloat today.

Attempts were being made today to drive the cattle across Santa Cruz Island for another attempt to haul them to Port Hueneme and then to market.

The circumstances that led to the stranding of the *Billcona* are not described. The tug followed a common route around the backside, or south, of Santa Cruz Island en route to Port Hueneme or Ventura. This route offers shelter from northwesterly swells.

The vessel had been originally designated *ST-399*, operated by the U.S. Army. A smokestack found on the beach apparently relates to this vessel.

Aurora
1940-1952
Miscellaneous Trades

Gross Tonnage	122 tons
Net Tonnage	59 tons
Length	79.3 feet
Beam	22.4 feet
Depth	10.3 feet
Decks	one
Official Number	239980
Construction	wood

Historical Record

A short notice (LAT, November 8, 1952) reports two men injured while the *Aurora* burned at anchor at Santa Cruz Island. The 1953-54 MVUS states that the *Aurora* burned "off Santa Cruz Island, near coast of Southern Calif." Despite these official records, enough of the vessel survived that it was rebuilt in 1954 and continued under the same official number with the new name *Jo Ann*. This vessel in all likelihood, did not leave a significant wreck scatter within the study area.

Corsair
1911-1953
Yacht

Gross Tonnage	18 tons
Net Tonnage	12 tons
Length	43.8 feet
Beam	11.0 feet
Depth	5.3 feet
Decks	one
Official Number	208712
Construction	wood

Historical Record

This yacht, powered by a gasoline engine, wrecked "on north end of Santa Cruz Island, Calif." on February 8, 1953 (MVUS 1954:748). All that was saved was the vessel documentation and "a small ship's bell."

Grumman AF-2W Guardian
1950?-1954
Propeller-driven Antisubmarine Plane,
U.S. Navy

Length	60-8
Wing tip Dimensions	43-4
Propulsion	Pratt and Whitney R - 2 8 9 9 - 4 8 , Hamilton Standard propeller, 4-beaded

Archeological Record

In this account, the archeological record is presented first, because the plane had been known for some time before it was identified.

Peter Howorth led the park archeologist to this strikingly well-preserved plane, which lies about 50 feet deep near Gull Island (Figure 8.5). Howorth had located the wreck while searching for abalone some years earlier. A total of six individual dives were made on the craft during the afternoon of August 10, 1985, obtaining video footage, photographs, and enough direct measurements to develop a rather crude sketch and allow identification. Visibility during the dives ranged from 10 to 15 feet.

The aircraft is a propeller-driven plane with a single rotary engine. The propeller is

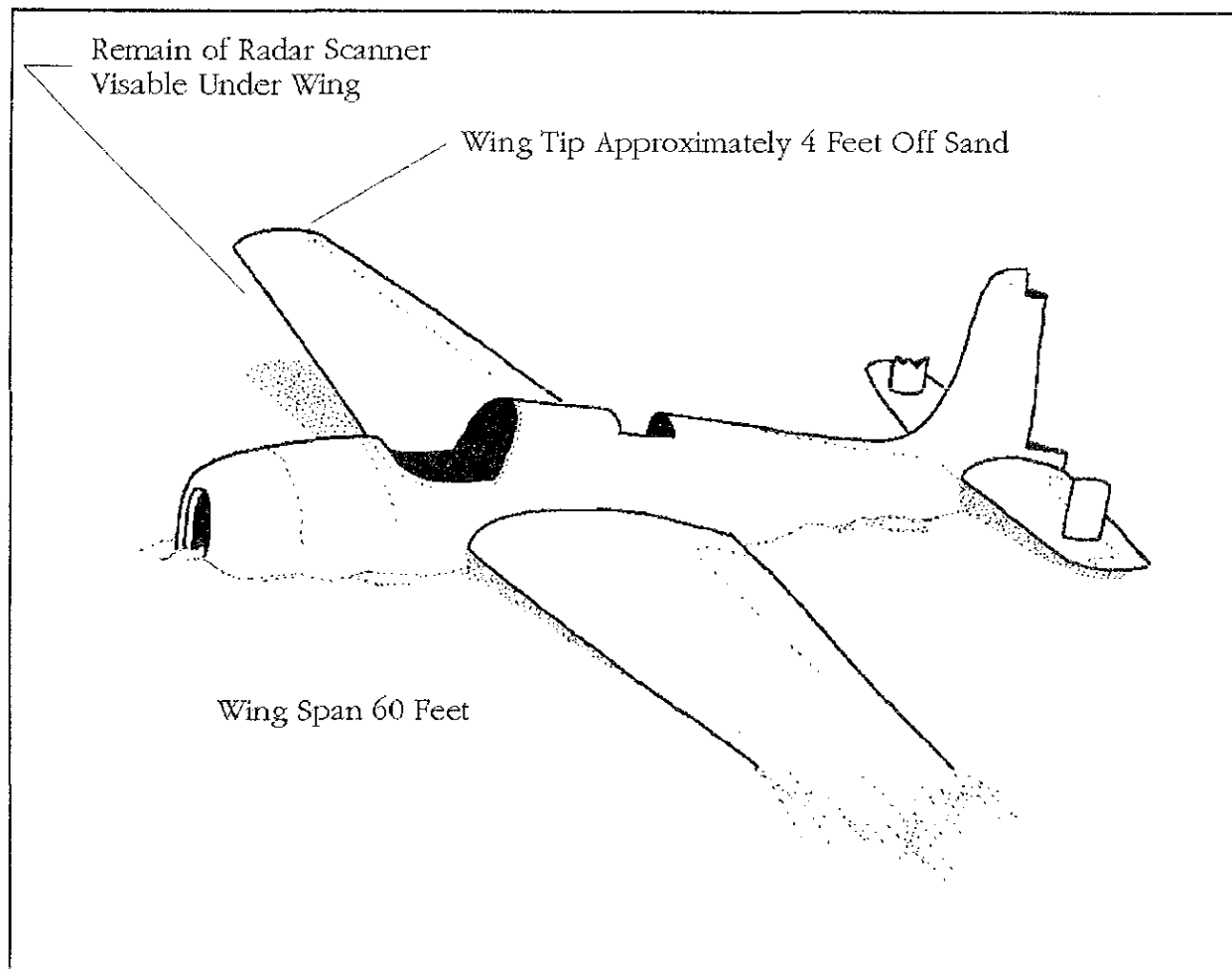


Figure 8.5. Field sketch showing Grumman Guardian on the bottom, Santa Cruz Island. Sketch by Mark Norder.

not attached to the engine. Howorth reports that the four-beaded prop lies about 75 feet away. Ailerons from the wings and portions of the rudder are missing. Howorth reported the tail was intact at the time of discovery, but since then a portion of the starboard tail has vanished, probably as a result of anchoring. Instruments, control stick, and seat belt hardware remain in the forward cockpit, suggesting that few divers have visited the wreck. The aluminum skin of the plane is very nearly intact. No collision impacts are evident. The plane sits on the bottom right side up with landing gear retracted under the wings, suggesting a low-angle, low-energy

forced landing before immersion.

The plane is 41 feet 6 inches long with a wing span very close to 60 feet. Since the propeller and hub are missing, the measured length must be somewhat short of the plane's actual length. Unusual and distinctive features are the auxiliary rudders on the tail plane.

After several abortive attempts, a return dive to this plane took place in February 1986. We were not able to read the plane's identification number on the port side just below the root of the tail plane. In addition, the radome is totally buried in sediment. The propeller was located aft of the fuselage. Additional video footage was taken in August

AF-2 GUARDIAN

Originally designed late during World War II to be the successor to the famed Grumman TBF/TBM *Avenger*, the Grumman Design 70 (XTB3F-1) first took to the air in December 1946. The prototype was originally powered by a P&W R-2800-46 and featured a Westinghouse J30, tail-mounted, for additional performance, although this dubious feature was never to be used.

At this time, however, the U.S. Navy, becoming increasingly concerned with antisubmarine missions, directed Grumman to revise the design to accomplish that mission; accordingly, a production contract was placed for the first specialized "hunter-killer" carrier-based ASW aircraft, the AF-2W and the AF-2S. The AF-2W, with an APS-20 search radar in a large belly radome, sought to contact the submarine; the accompanying AF-2S pinpointed the sub with its starboard wing mounted APS-30 radar; if necessary, it illuminated the target with its port wing mounted searchlight, and dropped depth charges or bombs from the weapons bay, or fired rockets from wing mounted rails.

The first production *Guardian*, an AF-2S, was flown on November 17, 1959, first squadron deliveries (to VS-25) commencing in October 1950. Production ceased in April 1953 after some 387 *Guardians* (including prototypes) were built. There were 193 AF-2S, 153 AF-2W, 16 AF-3W and 25 AF-3S examples built — the latter AF-3S featured a MAD (Magnetic Anomaly Detector) boom affixed to the starboard side of the fuselage.

By early 1953 *Guardians* began to be phased out of front-line Navy squadrons (for the S2F-1 *Tracker*, a combined hunter-killer aircraft was to take its place), being transferred to U.S. Navy Reserve squadrons. By August 31, 1955, VS-37, the last operational squadron, had surrendered its *Guardians*.

This was, however, not to be the end of the line for this Grumman product. Another life began, that of a fire-bomber, combatting forest fires in the far West. And after 20 years in that capacity, BuNo 123100 was recently restored to pristine flying condition, and as N3144G, wearing its original Navy finish and the markings of VS-25, it may be seen at Chico, California, being presently owned by the Aero Union Corporation.

Again, a proud product of the famed Grumman "Iron Works" lives on, past a quarter of a century, to delight antique airplane buffs as it snarls past during classic airplane fly-ins.

DIMENSIONS

Span 60 ft 8 in.
Length 43 ft 4 in.
Height 16 ft 2 in.
Wing Area . . . 560 sq ft

WEIGHT

Empty 14,580 lb
Max. (AF-2S) . . 25,500 lb
(AF-2W) . . . 22,500 lb

POWERPLANT

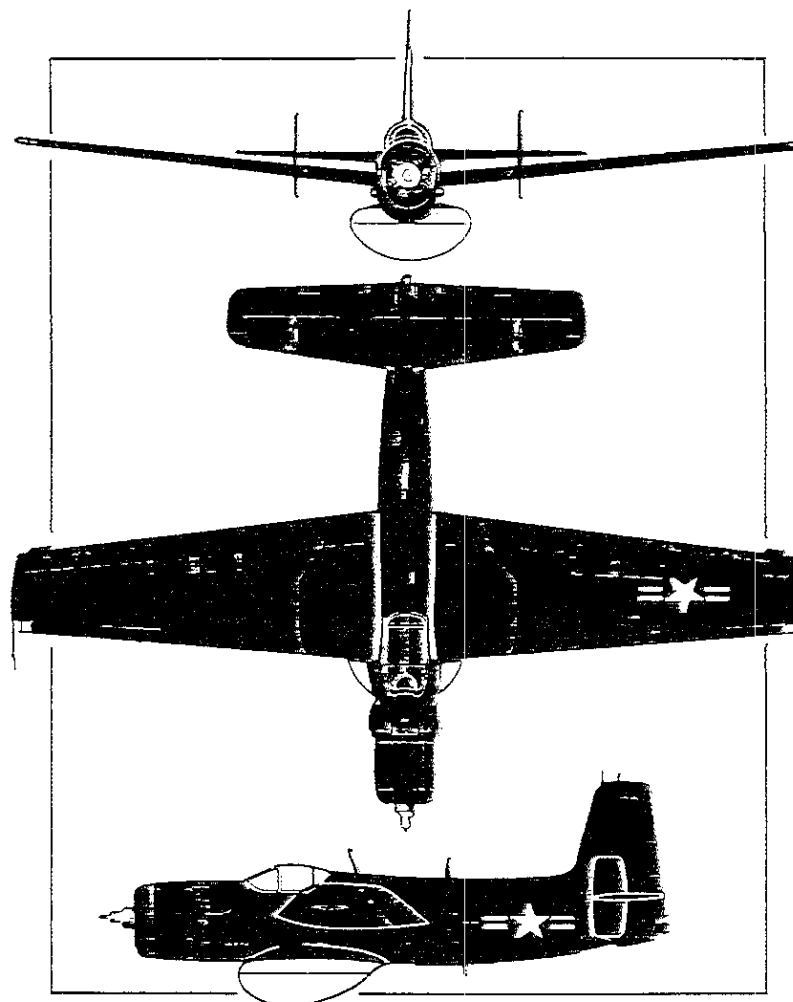
Prett & Whitney R-2800-48W
2400 hp

PERFORMANCE

Max. Speed 317 mph @ 16,000 ft
Service Ceiling . . 22,900 ft
Range 1210 mi

CREW

AF-2S 2
AF-2W 4



Grumman Aerospace Corporation
Bethpage, New York 11714

Figure 8.6. Specifications of the Grumman Guardian. Courtesy of Grumman Aerospace Corporation.

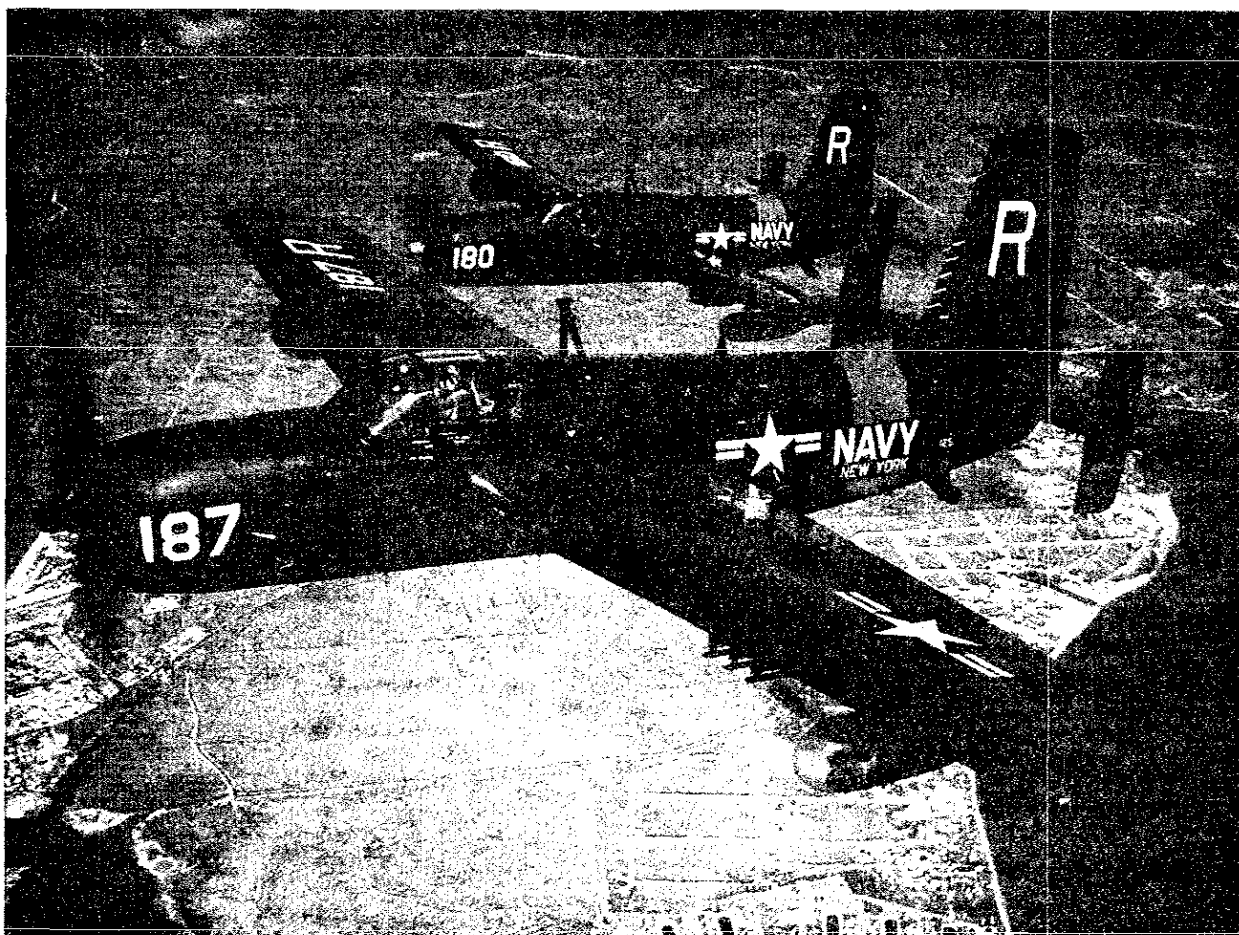


Figure 8.7. A pair of Grumman Guardians in flight. Photo courtesy of Grumman Aerospace Corporation.

1990, while we were field testing a remote-operated vehicle. The plane showed no appreciable deterioration during this time period. It has been videotaped on two other occasions since this initial documentation.

Historical Record

We have been able to identify the "Gull Island plane" as a Grumman AF-2W Guardian by comparing its dimensions with those of airplanes in a comprehensive encyclopedia of military aircraft (Angelucci 1981:450, 460), which reports a length of 43 feet 4 inches and a wingspan of 60 feet 8 inches for this craft and clearly illustrates the unusual auxiliary

rudders on the tail. Illustrations of the plane in this source do not indicate a second cockpit (Figure 8.6). Communication with Lois Lovisolo, corporate historian for Grumman Aerospace Corporation, resulted in our acquiring several manuals pertaining to this plane. An illustration detailing emergency exit modes and equipment shows that a second cockpit is indeed present; the open starboard hatch of the second cockpit is consistent with an emergency ditching at sea.

This plane carried a pilot (forward cockpit) and a radar operator, relief radar operator, and a radio-countermeasure operator in the aft cockpit. The AF-2W was designed for antisubmarine search and radar scouting

missions, operating together with an AF-2S, a version of the same plane that carried armament for destroying targets located by the AF-2W. One feature of the AF-2W we were not able to see during our dives was the prominent radome located below the wings and the forward cockpit.

The AF-2W first saw service in October 1950, following prototype flights in November 1949. Production ceased in April 1953 after 387 Guardians were built, 153 of which were the AF-2W version. August 1955 saw the last military service of these planes, although at least one AF served for 20 years as a civilian forest fire bomber. Only one of these planes, an AF-2S, remains in flyable condition today (Lois Lovisolo, personal communication, 1985).

On March 30 1954, this Grumman Guardian was not hunting submarines but was searching for a missing jet aircraft, a Banshee piloted by Lt. Albert McHenry, when the Guardian developed engine trouble. Lt. John W. Miller set the plane down and the crew, Bill Burris and Walter G. Brown, all exited the craft. Swimming to Santa Cruz Island, the three spread out a parachute and activated distress flares. A helicopter plucked them from the island the same day (LAT, April 1, 1954). The Guardian formed part of a 60-plane fleet searching for the lost jet, which disappeared while on a routine training mission from the Point Mugu Test Center.

The Grumman Guardian was one of the last propeller-driven combat aircraft that the navy flew. While relatively recent in years, the plane is quite old in terms of technology. A relatively rare military plane, this specimen near Gull Island is apparently one of the few that has escaped the melting pot and is in any condition for direct, firsthand study or evaluation (Figure 8.7).

Adore
1928-1954
Yacht

Gross Tonnage	27 tons
Net Tonnage	25 tons
Length	56.0 feet
Beam	16.0 feet
Depth	7.6 feet
Decks	one
Official Number	228159
Construction	wood

Historical Record

Designed by E. B. Schock and built by Wilmington Boat Works, this vessel carried a 100 hp Buda diesel engine. Previously known as the *Zaca*, the *Adore* sprang a leak 5 miles east of Anacapa Island and sank in deep water on May 24, 1954. The owners, Mr. and Mrs. J. L. West, were rescued by a Coast Guard patrol boat (VSFP, May 26, 1954). *Merchant Vessels of the United States* records that the vessel "grounded and broke up in surf approximately 3 miles east of Anacapa Lighthouse, Calif coast," which seems unlikely since there are no shoals at that location. However, this location is confirmed by Coast Guard casualty reports. Unusually strong tidal currents might conceivably cause rough seas in this area.

Sea Lion
?-1956
Sea Scout Cruiser

Historical Record

This vessel sank in 150 feet of water about one mile west of Pelican Cove on November 19, 1956, after a salvage attempt by the Coast

Guard failed. Skipper Ernest MacRostie, his wife, and four others were taken to Santa Barbara.

Marie
1943-1960
Charter Boat

Gross Tonnage	13 tons
Net Tonnage	7 tons
Length	40.1 feet
Beam	10.7 feet
Depth	4.7 feet
Decks	one
Official Number	253652
Construction	---

Historical Record

Apparently engaged in defense-related research, the *Marie* disappeared Tuesday, June 9, 1960, while crossing the Santa Barbara Channel to Smugglers Cove on Santa Cruz Island. The Raytheon Corporation had chartered the vessel, placing four of its employees on the vessel, along with three crew members.

The Coast Guard searched through the following Sunday, recovering the bodies of two of the seven aboard the vessel, as well as life preservers. Articles in the *Los Angeles Times* give the impression that most of the material recovered came from east of Santa Cruz Island. The 1961 MVUS gives the location of the sinking of the vessel as 34° 12' N, 119° 35' W, which is well out of the sanctuary. Although the vessel carried sophisticated electronic gear, it carried no marine radio.

Santa Cruz
1893-1960
Two-masted Supply Schooner
for Santa Cruz Island

Gross Tonnage	45 tons
Net Tonnage	43 tons
Length	64.0 feet
Beam	18.6 feet
Depth	6.4 feet
Decks	one
Official Number	116559
Construction	wood

Historical Record

The above statistics reflect the vessel's status as recorded in MVUS 1930 (Figure 8.8). *Santa Cruz* was built by Matthew Turner, Benicia, California, and is the only vessel from the yard of this most prolific of West Coast builders to have wrecked within the park. A gas engine was evidently installed after 1906, since the license for this year refers to the *Santa Cruz* as a schooner, while the 1907 and succeeding papers mention a gas schooner. New gas tanks were installed in 1927. In 1937, Dr. Stanton replaced the gas engine with a Buda diesel, which was replaced in 1942 with the Caterpillar diesel. A year later the mainmast and bowsprit were removed.

The following article gives a brief picture of the service of the *Santa Cruz* and its kindred vessel, the *Santa Rosa*.

Trade with the islands is in full swing at the present time, notwithstanding the rough weather. This morning unless there is a turn for the worse in

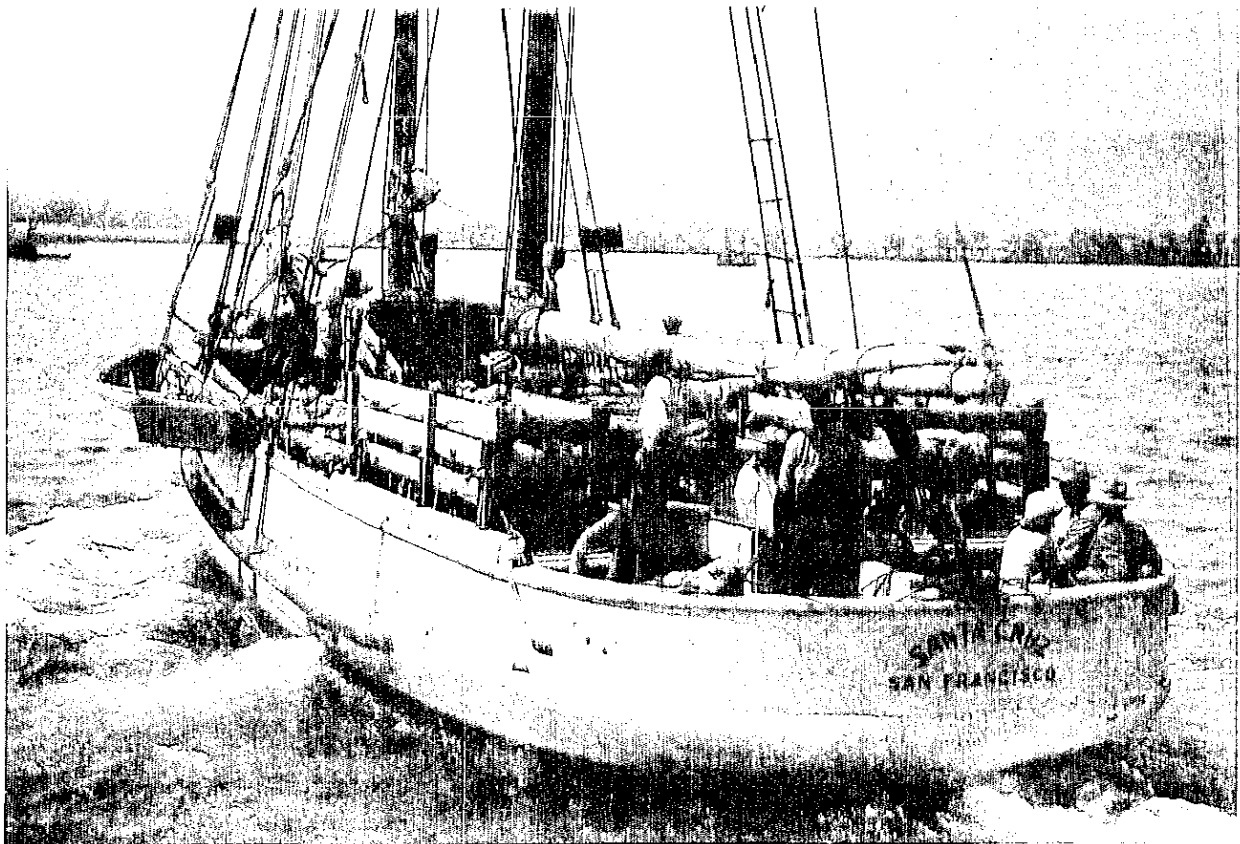


Figure 8.8. *Santa Cruz* underway near Santa Barbara, August 14, 1929. Photo courtesy of Sherman Library and Archives.

the condition of the channel, will begin the shipment of cattle to Santa Rosa Island, the first consignment of Arizona stock for Vail and Vickers island rangers having arrived. The cattle were taken on the wharf last evening, and will be loaded on the *Santa Rosa* schooner early this morning, about 200 head being carried at each trip.

The *Santa Cruz* island schooner came in yesterday with a cargo of wine, walnuts, and almonds, products of the island ranches, and returned in the afternoon for a cargo of sheep (SBMP, November 23, 1906).

The log entries show the *Santa Cruz* carried a wide variety of cargo and all sorts of visitors, including soldiers during WW II. The vessel was truly a sea going pickup truck, just like the ships serving the islands today.

The *Santa Cruz* stranded while running in the fog at Rincon Point, due to a defective compass on September 19, 1913. Captain George Nidever and two crew rowed all night to reach Santa Barbara, having no idea of their location. Several salvage attempts resulted in success on December 19 when the vessel was winched off the rocks and towed to San Pedro for repairs. It was the following spring before the *Santa Cruz* returned to service. The long history of this vessel ended when the ship was caught by a Santa Ana wind, a link in the

anchor chain parted, and the *Santa Cruz* was driven onto the western shore of Prisoner's Harbor, Santa Cruz Island on December 6, 1960.

Archeological Record

Material submerged in shallow water near the western edge of Prisoner's Harbor has been tentatively identified as pertaining to the *Santa Cruz* (Figure 8.9). The readily available wreckage apparently is a pile driver carried by the vessel during its last days. Much of the wreck scatter remains unlocated. The flat sandy bottom at this locality holds the promise of reasonably good preservation of wooden portions of the vessel.

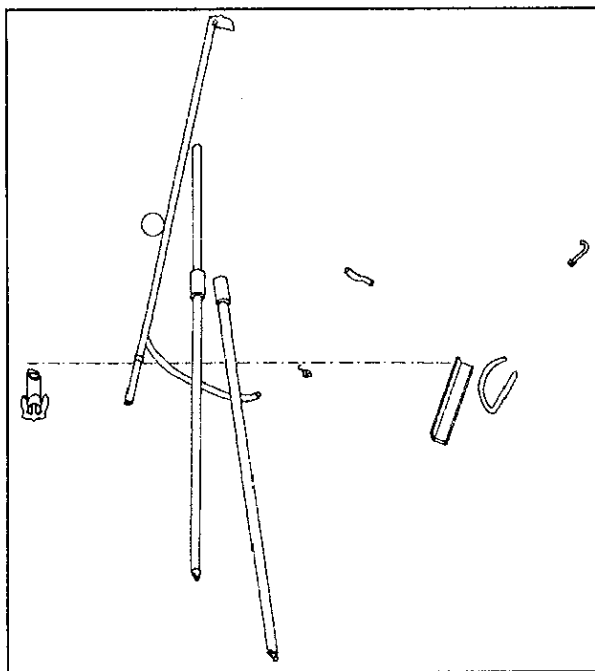


Figure 8.9. Wreckage attributed to the *Santa Cruz*. Drawing by Mark Norder.

Elaine
1961
Sloop

This twenty-six foot sloop dragged anchor and grounded between West Point and Frazier Point of Santa Cruz Island, the area of the infamous Potato Patch (SBNP, July 10, 1961).

Trilogy
1963-1966
Yacht

Gross Tonnage	7 tons
Net Tonnage	6 tons
Length	26.6 feet
Beam	9.1 feet
Depth	6.0 feet
Decks	one
Official Number	292480
Construction	fiberglass

Historical Record

The *Trilogy* went on the rocks in Forney's Cove, Santa Cruz Island, during the early morning hours of January 16, 1966, as a Santa Ana struck with winds in the 60-knot range. The five persons aboard climbed onto a 20-foot-high rock as the boat drifted away. The Coast Guard used a helicopter to rescue the group and return them to Santa Barbara.

Eros
1951-1966
YawI-rigged Yacht

Gross Tonnage	7 tons
Net Tonnage	5 tons
Length	32.6 feet
Beam	10.1 feet
Depth	5.1 feet
Decks	one
Official Number	277869
Construction	wood

Historical Record

Also on January 16, 1966, the *Eros* foundered at "33-57' N Lat, 119-24' W Long" (MVUS 1968:1167), a point slightly over 3 nautical miles due south of Middle Anacapa Island. The vessel was unmasted in the "worst storm in ten years." As the vessel was under tow to Marina del Rey, it "split at the seams and sank" (VSFP, January 17, 1966). The remains of the *Eros* would lie in about 340 fathoms of water. A letter from the owner reveals that the vessel had been stolen and was found abandoned at Port Hueneme on January 2. The Coast Guard was towing the vessel to Wilmington when it sank. The reported position, which is consistent in all the documents on this incident, seems far off course for a route from Port Hueneme to Los Angeles.

White Cap
1966
Sailboat

Historical Record

This twenty-four foot sailboat grounded at Smuggler's Cove August 22, 1966, and was a

total loss. The Coast Guard evacuated the two men aboard to Point Mugu.

Legend
1951-1967
Racing Yacht

Gross Tonnage	15.88 tons
Net Tonnage	14.0 tons
Length	43.0 feet
Beam	10.3 feet
Depth	6 feet
Decks	---
Official Number (until 1964)	281997
Construction	wood

Historical Record

This vessel raced rather successfully for several years, doing particularly well in the TransPac, from the West Coast to Hawaii. The *Legend* was the overall and class winner in 1957, and won its class in 1959. While returning to the mainland under a charter crew after the 1967 race, the vessel stranded on San Miguel Island after running for several days without being able to secure a good position due to persistent fog.

The vessel carried a six cylinder Chris-Craft engine, with a bore of 3 7/16 inches. The vessel's hollow stainless steel keel carried water ballast which was the source of the crew's drinking water. No organized salvage occurred (Phil Campbell, former owner, personal communication) although Peter Howorth noted "extensive pilferage" at the site.

Nimbus 3
1968
Weather Satellite

Historical Record

Now for something a little different. In May 1968, a fleet of five vessels searched the Santa Barbara Channel from Gaviota Beach to San Miguel Island for the Nimbus 3 weather satellite, sunk when the malfunctioning booster was destroyed on purpose. Searchers were hopeful the \$50 million satellite would be found in one piece, "because otherwise some of the searchers would have noticed increased radioactivity in the channel" (VSFP, May 22, 1968:A-2). While this particular satellite is hardly the only piece of space debris submerged in the study area, others may be expected in the future due to the proximity of launch facilities at Vandenburg Air Force Base.

Black Dolphin

1963-1968

Passenger Vessel

Gross Tonnage	21 tons
Net Tonnage	20 tons
Length	42.5 feet
Beam	15.0 feet
Depth	6.3 feet
Decks	one
Official Number	290301
Construction	wood

Historical Record

The *Black Dolphin* stranded at Chinese Harbor, Santa Cruz Island, on Christmas Day, 1968 (MVUS 1970). An unattributed newspaper article (January 29, 1969) states that the vessel was towed from the island to the Santa Barbara Harbor where it sank in 36 feet of water. The intent was to salvage and repair the vessel. Coast Guard records state that the vessel grounded and broke up on the beach at Chinese Harbor, Santa Rosa Island.

The vessel was then intentionally burned. An unattributed newspaper article (January 29, 1969) states that the vessel was towed from the island to the Santa Barbara Harbor where the vessel sank in 36 feet of water. Perhaps salvors were attempting to rebuild the vessel from the burned remnants.

Marimari

1965-1969

Yacht

Gross Tonnage	8 tons
Net Tonnage	7 tons
Length	30.2 feet
Beam	10.0 feet
Depth	5.4 feet
Decks	one
Official Number	501503
Construction	wood

Historical Record

The *Marimari* stranded off Santa Cruz Island on January 20, 1969 (MVUS 1970).

Pinocchio

1965-1969

Yacht

Gross Tonnage	11 tons
Net Tonnage	8 tons
Length	30.9 feet
Beam	10.9 feet
Depth	4.7 feet
Decks	one
Official Number	500951
Construction	wood

Historical Record

This boat stranded on West Anacapa Island on August 16, 1969. The skipper,

Englyn
1936-1974
Yacht

Gross Tonnage	---
Net Tonnage	---
Length	36 feet
Beam	13 feet
Depth	---
Deck	one
Official Number	---
Construction	---

Historical Record

This vessel, a converted Block Islander ketch formerly used for fishing built in New England, wrecked January 11 in a Santa Ana at Forney's Cove, Santa Cruz Island. Fred Gamble pointed out the single cylinder engine of this vessel on the beach and kindly provided the above information.

The Thanksgiving Santa Ana Storm of 1976

Lured to the islands by beautiful weather, approximately 35 to 40 recreational craft were sunk in a violent Santa Ana windstorm that erupted over Thanksgiving weekend, 1976. No detailed account of this disaster has been located yet, but local yachtsmen remember this as the most destructive Santa Ana storm on record. Because specifics on the vessels have not been found, they are

An unattributed newspaper article dated March 27, 1972, reports the swamping of a 22 foot Star class sailboat at Scorpion Anchorage, Santa Cruz Island. One of the crew, Charles A. Kern, drowned in the incident.

not included in the summary tables for this report.

This partial list records some of the vessels, mostly small yachts, which were lost in this storm on November 27 and 28, 1976. None of these vessels have official numbers.

April II
Ava K Four
Evening Star
Gail
Galadriel
Gennie M
Gypsy Angler
Had To
Loch Ellen
Narragansett
No Name (Nov 28)
Peregrine
Sea Rat
Shanty
Skippy (Nov 28)
 Unknown (Nov 28)

Shamrock
 1976-1977
 Yacht

Gross Tonnage	20 tons
Net Tonnage	18 tons
Length	50.0 feet
Beam	21.5 feet
Depth	feet
Decks	one
Official Number	571693
Construction	fiberglass

Historical Record

The *Shamrock* had a short but eventful life, having been the object of a Coast Guard search in April 1976 (SBNP, April 19, 1976),

before burning and sinking on the south side of Anacapa Island on March 12, 1977 (VSFP, March 12, 1977). The 1978 MVUS gives the location as "¼ mile offshore from the south side of Anacapa Island, CA."

Peacock?

The very name of this ship, as well as the circumstances of its sinking, are unclear, but the large vessel lying 60 feet deep at Scorpion Bay, Santa Cruz Island, provides an interesting dive. Historically, it is one of the most recent of the large wrecks in the Channel Islands.

Today the vessel is referred to as either the *Peacock* or the *Spirit of America*. Several stories exist about the wreck; in general, the ship was being salvaged in Scorpion Bay, and through either storm or intentional sinking, came to rest at its present location.

A coastal minesweeper (MSC) of the "Bluebird" class was launched as the *Peacock* (MSC 198) in June 1954. The vessel was decommissioned in 1975. The *Peacock* was 370 tons and 133 feet long, with a 28-foot beam. The vessel was driven by two engines, turning twin shafts, and was "constructed throughout of wood and other materials with the lowest possible attraction to attain the greatest possible safety factor when sweeping for mines."

These specifications in general fit the vessel on the bottom near Scorpion Bay, which is one of the more popular recreational dives near the islands. On the beaches at both Smugglers Cove and Scorpion Bay, one can find large pieces of similar wooden vessels constructed with yellow metal fastenings and laminated beams, which have been sawn through deliberately in an apparent salvage operation.

Smuggling: The Unspoken Trade

Richard Henry Dana first discussed smuggling in the Santa Barbara Channel. By the very nature of smuggling, vessels involved in the trade keep a low profile and leave a thin paper trail. We, therefore, know little about the specifics of smuggling. As an overall view of the practice, the following article is as timely today as when it was first written, even though the specific items smuggled have changed with the years (the racial and personal slurs were typical of local journalism of the period).

OPIUM SMUGGLING

Santa Barbara Channel Furnishes Many Opportunities

Recent developments indicate that the gang of opium smugglers, known to be strung on the Pacific coast, has found a new field of operations along the shores of the Santa Barbara Channel—and, all things considered, the wonder is that the field was not found long ago. Possibly, indeed, it was.

There is no telling how much of the drug might have found its way into the San Francisco market by this route, for the revenue officials are proverbially—sometime interestedly—slow, and smuggling may be going on in a given locality for years before any knowledge of the fact comes to the authorities. The channel route, away from the hurry and bustle of the large ports north and south, is as quiet as could be desired for the business.

Only the coastwise steamers, with an occasional lumber schooner and here and there a fishing vessel, disturb the smooth waters that lie between the Santa Barbara Islands and the main land, and those islands themselves, several of them deserted rocks inhabited only during a part of the year by Chinese [*sic*] fishermen, and honey-combed with wave-worn caves, afford a thousand hiding places for the drug. There are secure anchorages that revenue vessels never think to visit, and here could lie all unperceived the swift little schooners that ply in or out to sea to meet the China steamers in the night and take off the stuff upon which it is not desired to pay duty. Running back to the island anchorages, nothing is easier than to beat across the channel and land the opium either at Ventura or Santa Barbara or at some point between those towns.

Nobody is on watch there—for, although there is an agent of the collector of the port of Wilmington resident at Ventura, his duties require him to cover also the towns of Hueneme and Santa Barbara, and he is a sleepy old fossil anyway, whose ideas run vastly more upon what he is to have for the next day's dinner than upon the preservation of Uncle Sam's interests. So long as he draws his salary, he thinks that he has discharged his every obligation to the government. Once landed, of course, the drug passes into the hands of the Chinese, who are numerous thereabouts, and the little brown men

proceed to realize upon it in their cunning fashion—*Oakland Times* [VSFP, September 18, 1891].

Just as we were on the final editing of this publication, Robert Schwemmer brought to our attention the following account of a previously unknown vessel involved in smuggling.

Vessels Mistakenly Placed in the Islands

The following vessels, often cited by various sources as having wrecked within the park, are not, in fact, within the area covered by this report.

J F West

This vessel apparently did not exist. Haller (1986) could find no evidence of registration of a vessel of this name, which is referenced by O'Neill (1939), a secondary source full of inaccuracies in the sections dealing with maritime history. Since O'Neill states that the vessel, allegedly a schooner, carried four masts, it surely would have been documented in surviving primary records. There is no record under this name in *Merchant Vessels of the United States*. The name may be an amalgamation of names of vessels that did in fact wreck at San Miguel Island.

Babina

This vessel, which sank in March 1923, did so about 60 miles south of San Francisco, and "sixteen miles from Santa Cruz"—the city,

not the island (MVUS 1924). Some references list this vessel as the *Babinda*. Again, this locality is near the city, not the island.

Crescent City

This vessel, official number 203602, 701 gross tons, stranded on July 7, 1927, at Santa Cruz Light, California (MVUS 1929). Again, this locality is near the city, not the island.

Liverpool

This vessel wrecked in the Other (English) Channel Islands.

Nancy B

This is apparently the same vessel as the *Nancy Lee*, described in the chapter on fishing vessels.

St. Anne of the Sunset

This vessel also wrecked near Port Hueneme, nowhere near Anacapa Island.

Seahoph

This distinctly odd name, which has not been located in *Merchant Vessels of the United States*, may be a typographical error for the *Seaborn*, which was discussed earlier.

CHAPTER IX

Conclusion

All together, 150 vessels are now known to have wrecked in the general area of Channel Islands National Park and National Marine Sanctuary before the establishment of those preserves in 1980. Records indicate that 94 of these vessels wrecked within Channel Islands National Park; 21 of them have been located and identified. Twenty-seven vessels sank within the sanctuary but probably outside the park. Three vessels sank well outside both sanctuary and park. Eight vessels, all of which grounded within the park, were refloated and removed or were reconstructed. The records for eight vessels are vague and unclear, but the vessels lie somewhere in the area of the park and sanctuary. Another eight vessels turned out not to lie within the immediate study area for a variety of reasons, and additional data are needed on at least eight more vessels in order to determine their situation. In addition to these documented vessels, an undetermined number of generally smaller, undocumented vessels remain unrecorded.

It is useful to consider these shipwrecks in terms of two major categories—transient vessels and local vessels. In this report, we define transient vessels as those engaged in

commerce and the lumber trade, carrying cargoes to or from West Coast ports. Fishing, sealing, government, and "other" vessels make up the local category—vessels whose work related to the islands of the park and their resources.

For transient vessels, the islands were little more than obstacles on the way from one port to another. These ships exemplify the growth of international trade during the nineteenth century and the beginnings of a global culture and a world economy. For local vessels, the islands and their offshore resources offered economic rewards and incentives sufficient to induce people to undertake significant risks. Studies of these vessels are intimately bound up with the natural resources of the islands and their depletion over time, the needs of the developing California society, and the isolation of the islands and their suitability for covert activities, mostly smuggling.

On the social level, too, important differences separated transient and local vessels. The deepwater sailors aboard the *Goldenhorn*, the *Cuba*, and the *Aggi* worked on a cosmopolitan scale and would have had no particular ties to southern California and

the Channel Islands. The local trades involving island support, sealing, fishing, and tourism related to the region, then as now, in a very different, more intimate way. Local vessels, their crews, and their activities were but a portion of a total system that was based on mainland social and economic institutions. This system can best be seen in the island shore camps, supporting boats, and fish markets that supported fisheries around the islands, notably Santa Cruz, in the first quarter of the twentieth century. No aspects of this system have been studied adequately. This is equally true of the abalone and sealing trades in the islands, both of which involved island camps as well as mainland economic systems.

The transient and local divisions translate closely into large versus small vessels. The gross tonnages of the vessels described in this report run from the 5.67 tons of the *Chappo* to the 7,318 of the *Pectan*. All the transient vessels have gross tonnages greater than 300, with the single exception of the lumber schooner the *G W Prescott* (112.97). All the fishing and "other" (except for barges) vessels discussed in this report fall below 300 gross tons. The largest of these vessels is the *Equator* with 238 gross tons, and it is really more a transient than a local.

The wreck assemblage as presently understood does not include examples of all the significant craft that navigated around the islands. Unknown are examples of *tomols*, the most sophisticated watercraft of the Chumash, and Manila galleons, despite legends about such a craft near the shores of San Miguel Island. No otter hunting vessels or pre-gold-rush trading ships wrecked in the islands. Smugglers left behind little evidence of their activities. The wrecks of the islands do, however, include many examples of turn-of-the-century commercial vessels, both sail and

steam, and an assemblage of lumber schooners, although examples of steam-powered lumber vessels are absent. These larger vessels strikingly illustrate the rise of Los Angeles as a seaport and the development of a transportation network late in the nineteenth century.

Not surprisingly, transient and local vessels wrecked in different ways, although the dominating influence of the prevailing northwesterly weather and ocean currents affected all categories of vessels. For at least two vessels, the *Aggi* and the *Ella G*, disaster commenced to the north along the central coast, and both vessels were struggling for refuge when they came to grief. The *Sea Foam*, the *Shasta*, and the *Yankee Blade* wrecked to the north, and the northwest winds and currents scattered their debris on the islands. This factor certainly must be considered when examining any archeological wreckage; just because wreckage is found on the islands does not necessarily mean that the vessel originally wrecked there.

Fog is prominently associated with shipwrecks of transient vessels. In two cases, those of the *Goldenhorn* and the *Crown of England*, fog in combination with the Davidson Current (or at least a west-running current in the case of the *Goldenhorn*, contrary to "normal" patterns) threw the vessels off course. A further suggestion of the combined effect of currents and fog is the wrecking of the *Cuba* and the lumber schooners *G W Prescott*, *J M Colman*, and *Comet* during the months of August and September, when Oceanic Period currents would set vessels coasting offshore toward San Miguel Island. Vessels in fog were more likely to wreck when the normal currents for that time of year set the vessels toward a hazardous area, which was usually San Miguel Island.

Of the five working lumber schooners we have described, all except the *Dora Blum* wrecked in the area between Simonton Cove and Point Bennett on San Miguel Island after prolonged fog-bound sailing. The *Jane L Stanford*, of course, is clearly aberrant. Not even a coastwise lumber carrier, it was used as a fishing barge when fatally rammed. Deliberately taken to Santa Rosa Island for disposal, *Jane L Stanford* is not a shipwreck in the normal sense.

Table 9.1 lists transient ships classified as vessels of commerce divided into those proceeding to or from Los Angeles and those engaged in coastwise voyages, principally between San Francisco and other destinations.

Clearly San Miguel Island lives up to its reputation as a catcher's mitt for coastwise shipping, especially lumber schooners, whereas Los Angeles-involved wrecks occur on Anacapa or Santa Rosa islands. Santa Rosa Island seems to offer a fatal attraction for coal carriers: two such ships wrecked and another two grounded on its shores.

Commercial vessels have wrecked or grounded on the outer islands of Santa Rosa and San Miguel with only two exceptions, the *Liebre* and the *Beulah*, both of which grounded on Anacapa Island while outbound from Los Angeles.

Vessels of less than 300 gross tons, with the exception of the *G W Prescott*, are small local craft that were drawn into the waters of the park and sanctuary by the marine and terrestrial resources of the islands. These vessels show the rise of a relatively small fishing fleet based in Santa Barbara and the later arrival, in the 1920s, of a much larger flotilla from San Pedro. Sealing is the one trade represented in the wreck assemblage that is not related to southern California. Occurring relatively early, before Los Angeles really developed as a harbor, and linked to northern ports, sealing was a very different activity from the others discussed here.

The remains of all these vessels provide researchers with the opportunity to look for archeological correlates of the ethnicity

Table 9.1. Vessels, West Coast Port and Wreck Locations

<u>Vessel</u>	<u>Port</u>	<u>Year</u>	<u>Island</u>
<i>Goldenhorn</i>	Los Angeles	1892	SRI
<i>Liebre</i>	Los Angeles	1921	ANI
<i>Beulah</i>	Los Angeles	1933	ANI
<i>Patria</i>	Los Angeles	1954	SRI
<i>Chickasaw</i>	Los Angeles	1962	SRI
<i>Aristocratis</i>	---	1949	SRI
<i>Crown of England</i>	San Diego	1894	SRI
<i>Anubis</i>	San Francisco	1908	SMI
<i>Pectan</i>	Port San Luis	1914	SMI
<i>Aggi</i>	San Francisco	1915	SRI
<i>Cuba</i>	San Francisco	1923	SMI

chronicled in the historical record. People of Italian, Slavic, Portuguese, Japanese, and, most recently, Vietnamese origin were particularly prominent in the fleets frequenting the islands. Fishing and small boat operations were an entry level occupation for recent immigrants to southern California.

The social milieu surrounding boat use was complex. Informal arrangements governed the crew of a fishing boat, for example, often dictated by familial or other important obligations (Scofield 1951) that varied among ethnic groups. Arrangements ran the gamut from the formal enrollment of a crew member aboard the *Cuba* and the employment of a hand by a lumber schooner captain and his wife to the handshake that welcomed a crew member aboard his father-in-law's purse seiner.

A shore camp system was often associated with the trades in which these local craft participated. Chinese-American abalone harvesters, lobstermen, and general market fishers all lived at suitable localities on the islands, particularly on Santa Cruz, using boats for gathering the catch, transporting it to market, and resupplying the operation. Most of these individuals were probably opportunistic nautical entrepreneurs, willing to make money from whatever opportunity presented itself—transport of tourists, salvage of wrecked vessels, and perhaps even illicit activities.

The literature suggests that many of these vessels were locally constructed. Details of the local types are not well known. The history of many of these smaller vessels is surprisingly complex, replete with rebuilding, conversion from military to civilian usage, and changes in methods of propulsion. Fishing vessels and their material remains, often tacitly scorned in the past, will yield to the

thoughtful researcher a rich record of human endeavor.

Local small craft wrecked for somewhat different reasons from those of large craft. Sealing and fishing vessels alike wrecked not only in storms but also by dragging anchor, by being blown ashore in Santa Anas, and by suffering on-board fires—a very different profile from the transient vessels. Fire at sea has been a common problem for small craft in the islands, several of which have sunk well offshore. Burning vessels tend to be concentrated toward the eastern end of the islands. For all vessels in this category, wreck locations must be regarded as imprecise.

Storms have wrecked many small craft in the islands. Santa Ana conditions and strong northeast winds have been a particular problem for local small craft, especially off Anacapa and Santa Cruz islands. Such weather provided ideal conditions for the larger schooners transiting the Santa Barbara Channel, which were easily handled in 30-knot winds on a beam reach. Vessels wrecked during storms generally lie close to shore and can be located more precisely than vessels that sank offshore. Many shoreline wrecks probably have been thoroughly salvaged.

Local small craft have wrecked primarily on Santa Cruz Island, which was the scene of none of the transient vessel incidents. This pattern reflects the large number of anchorages on this island and the high level of commercial fishing and recreational boating that occurs in the island's offshore waters. Most of the yachts identified in the written records considered in this report wrecked in the vicinity of Santa Cruz Island.

Most sealing vessels wrecked on San Miguel Island, with the exception of the *Ella G*, which wrecked while taking refuge at

Santa Rosa Island and actually was not sealing in the area at all. Of all the local trades, sealing was distinctive in that many vessels in this activity were related to northern ports, with the exception of those operated by Rogers Brothers of Santa Barbara. It would be tempting to attribute the wreck pattern of sealing vessels to a heavy concentration of pinnipeds on San Miguel Island, like the present day distribution, but the historical record is clear that animals were taken on Santa Barbara and Anacapa islands as well. The concentration of wrecked sealers on San Miguel must be due to the combination of small boats and heavy weather, the trap that is Cuyler Harbor, and, perhaps, the unfamiliarity of northern-based crews with the local hazards.

For local vessels, Cuyler Harbor on San Miguel Island has been a very effective trap. At least six vessels wrecked there, as ineffective anchoring failed to stop their progress toward a lee shore. The bizarre sinking of the *Liberty* by a landslide is a curious exception. With at least two additional vessels wrecking in Cuyler since 1980, the area is a prime location for archeological survey.

Since storms were a prime cause of wrecks, it is not surprising that December and January were common months for wrecking. The fewest wrecks occurred in April and May, which are still rather breezy months around the islands. Although some storms are certainly vicious, the Santa Barbara Channel is a relatively calm body of water, lacking the persistent dangers and storms of regions such as the North Atlantic, the English Channel, Cape Hatteras, or the Columbia River entrance. The wrecks discussed in this report demonstrate that any ocean can prove hazardous for a mariner.

The types of vessels wrecking in the islands changed through time, and wrecks became more frequent. The decade of the 1850s was distinctive in witnessing the wrecks of two passenger steamers and one small schooner. A subsequent 18-year hiatus ended when a number of vessels, primarily sealing ships, sank during the mid-1870s. Fairly regular wreck events have occurred ever since.

The year 1923 was pivotal. Not many fishing vessels wrecked before that year, but after 1923, over half the vessels in the wreck assemblage were engaged in fishing. The last working lumber schooner wrecked in 1923, and only one of the large commercial vessels wrecked after that date. Before 1923, wrecks occurred less than once a year. After that date, the rate doubled, with roughly two vessels wrecked every three years. Sinking through burning occurred primarily after 1923, reaching a peak in the 1950s.

During 1923, in a period of a little over six months, the fishing vessels *Eagle* and *OK*, the lumber schooner *Watson A West*, and the steamer *Cuba* all came to grief in the islands. This variety of sail and steam vessels characterized the vessels in use in this region during the last portion of the nineteenth century and the first quarter of the twentieth century. These vessels have all left physical evidence for study within the park. On the other hand, several significant types of shipping are absent from the shipwreck assemblage represented within the park; there are no steam schooners or coastwise passenger steamers of the type prominent before the 1930s. Nonetheless, the sample does indicate the wonderful variety of vessels that worked the seas during the opening years of this century. Consider that all the following vessels could have been seen at work in 1903:

The *Jane L Stanford*, a wooden boat showing a long development of traditional techniques;

The *Silberhorn* and the *Matterhorn*, sister ships of the *Goldenhorn*, all iron barks built in a style reminiscent of wood construction;

The *Aggi*, a full-rigged ship in steel showing the final stages in the evolution and development of this form;

The *Cuba*, a steamer of modern design and construction having more in common with a World War II Liberty ship than with the *Winfield Scott*, only 50 years in the past;

The *Pectan*, a brand new tanker and an example of the emerging specialized cargo vessel.

This variety of working vessels is not present in the area today. In a short tour around the park, visiting perhaps six wrecks, one can see examples of many different types of vessels and relate their activity to the growth of modern California.

Virtually all the vessels plying the channel were products of an industrial society. Even the Chumash tomols, hand built by specialists, were not always used by their makers. Most of vessels wrecked in the park were produced with power equipment in an industrial setting (Greenhill 1988). Saws, drills, and the like left their mark on the timbers now on the beaches, and it is clear that the vessels wrecked in the park represent a time when the adze and the hand craftsman were vanishing. The local production of boats in Santa Barbara, such as the *Irene* by Ira Eaton, may be an exception to this generalization.

Ironically, many of the vessels and wreck scatters treated in this assessment of submerged cultural resources are not submerged at all, primarily because of the uncooperative nature of wood in this regard. The floatable, and hence more mobile, fragments of wooden vessels become scattered

as currents and tides work them, in contrast to the remains of iron and steel ships, which tend to stay put (Figure 9.1). On the other hand, much of the material from wooden vessels is readily available for study by researchers and visitation by the nondiving public right on the beach. Even vessels that are primarily submerged have some associated material on nearby beaches.

The wreck scatters of the Channel Islands represent a wide range of social groups, from cosmopolitan to local, and a correspondingly wide range of research problems. If this report demonstrates anything, it is that opportunities for meaningful research are rich. Coordinated historical and archeological studies can get beyond the artifacts to the

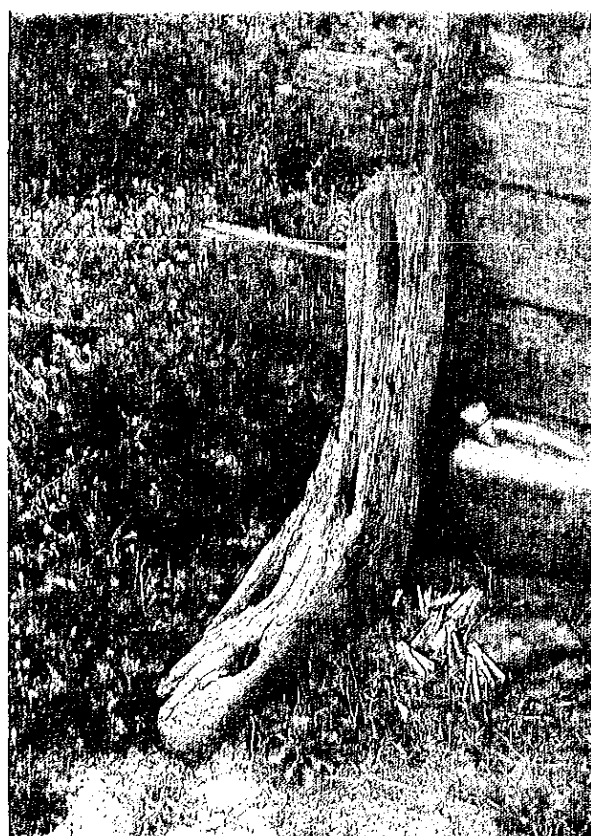


Figure 9.1. Knees and deck planking of an unidentified wreck in use as a wind screen at Bath Beach, San Miguel Island.

people who used them and illuminate the role of maritime activities in the diversifying society of the nineteenth-century United States. The detailed vessel histories and archeological findings that will result from

such research will illuminate important cultural developments and increase our appreciation for the historical value of the Channel Islands and their place in the history of California and the United States.

CHAPTER X

Management Recommendations

Over 100 vessels have wrecked in Channel Islands National Park and National Marine Sanctuary; 21 of these have been located. Those located represent the largest, most conspicuous, easiest to reach, and most at risk. Only the *George W Prescott* and the *Watson A West*, of the larger commercial vessels, remain unlocated. Many unlocated wrecks are protected by covering blankets of sand and are only intermittently exposed to either vandals, sport divers or archeologists.

Considerable work has been accomplished in the archives, providing a substantial basis for fieldwork designed to identify additional wreck scatters. Archival work should continue because basic information on some ships has not yet been found; insurance records, for example, have not been examined and might provide new information.

Several agencies share jurisdiction of the wrecks in the park and the sanctuary. The state of California owns wrecks on submerged lands, those lands lying below mean high tide. Mean high tide is also the landward boundary of the sanctuary. Around San Miguel Island, the U.S. Navy owns the tide lands from the high-water mark and extending 300 yards beyond the low-water mark. It is responsible

for managing impacts to historic resources within the Point Mugu Missile Test Range. The Nature Conservancy owns Santa Cruz Island above the water line.

As our discussion of the archeological record shows, most of the wrecks in the islands sprawl across these boundaries. Even wrecks such as the *Dora Bluhm* and the *Jane L Stanford*, which are known only from remains above high tide, probably have material submerged offshore. Field investigations by the NPS should proceed in partnership with the other agencies that share responsibility for managing these resources. This report itself demonstrates the benefits of such cooperation. A great deal of the information presented here would not have been possible without the archival work supported by the Point Mugu Missile Test Center.

Future historical work should emphasize oral history and popular history, since relatively little remains to be done in formal archives. This effort should recover photographs and other documentation tucked away in attics and family albums. The material available from Carol Jung relative to the *Jane L Stanford* shows the substantial

insight that such material contains. Many local organizations work in local history and the NPS should coordinate its research actively with them. A study of both commercial and sport fishing in the Channel Islands, focusing particularly upon biological impacts of resource extraction, is needed. Some of the material presented in this report should prove relevant to such a study.

The recording of material from the *Goldenhorn* on the shoreline of Santa Rosa Island indicates that about a kilometer of sea bottom between the main wreck scatter and the shoreward coal pile should be examined for additional wreckage. Wood in the associated lumber pile should be sampled and identified to determine whether it belongs to the *Goldenhorn*.

Future field investigations should attempt to locate the two missing lumber schooners, the *George W Prescott* and the *Watson A West*. The wreck scatters of the *Liberty*, the *Santa Rosa*, the *Kate and Anna*, the *Isabella*, the *NB*, and the *Josie Lena* in Cuyler Harbor should also be investigated; this is a sizable collection of late-nineteenth-century work boats with diverse histories. This fieldwork could be carried out in combination with investigations of the nearby lumber schooners that wrecked on the northwest coast of the island.

The archival record of the *Dante Alighieri II* is so detailed that locating its wreckage should be easy. Work should focus on the four known but as yet unidentified wreck scatters within the park. As wrecks are exposed by moving beach sands, the material should be aggressively and thoroughly investigated. Recent fieldwork on the *Comet* shows how much effort can be required to shovel sand from only small pieces of wreckage. As wreckage is recognized and located, it should be recorded, sampled for

identification, and tagged in a manner similar to techniques now being employed elsewhere.

The wreck scatters of the *Jane L Stanford* and the *Broadbill* have been identified and are worthy of additional study. The wealth of documentation for the *Jane L Stanford*, including the oral history from Carol Jung, together with the presence of appreciable material remains, makes further studies of this vessel appealing. Its study could go well beyond standard archeological work to talk of the vessel's cultural role—that is, the importance of the ship to the people who used it and who were affected by it. The disciplines of history, historical archeology, and ethnohistory should be employed to fully study the *Jane L Stanford*.

Table 10.1 lists small craft that have been lost in shallow waters and should be relatively easy to find. They consist of a variety of early fishing and work vessels, mostly power craft. Study of these vessels should be integrated with studies of the shore camps with which many of them were associated and with the historical study of fishing in the Channel Islands.

The wrecks located entirely within the marine sanctuary provide a challenging combination of small boats, deep waters, and indefinite locations. An exceptional prize in the sanctuary assemblage would be the *Mary* (1891-1968), a vessel that would be an appropriate focus for additional historical studies in an attempt to more clearly define the location of the wreckage.

We recommend that more emphasis be placed on orienting island and boat patrol personnel to the resources of the known wreck scatters. These are the *Equator* and the *Winfield Scott* on Anacapa Island; the *Santa Cruz*, the *Peacock*, and the *Grumman Guardian* on Santa Cruz Island; the

Goldenhorn, the *Crown of England*, the *Chickasaw*, the *Dora Bluhm*, the *Broadbill*, the *Aggi*, and the *Jane L Stanford* on Santa Rosa Island; and the *Cuba*, the *Comet*, and the *J M Colman* on San Miguel Island. Interpretation of these wrecks should be developed both for the general public and for scuba divers. Significant material from at least six wrecks, as well as the four "mystery wreck scatters," is available to hikers walking the beach, especially on Santa Rosa Island. Wreck-focused interpretive diving trips should be promoted and expanded.

Interpretive talks can use the rich anecdotal accounts presented in this report and should also employ living history techniques, videotapes, and other innovative ways of developing the themes stressed in this publication. These themes are, predominantly, the rise of the Los Angeles ports from their inception to their status as the most important shipping-port complex in the nation, the rise of the fishing industries in the Santa Barbara Channel and their effects on the present environment, and the role of local small craft in accessing and developing the islands' resources.

It is no longer adequate for an archeologist to prepare only a technical report for the

edification of professional colleagues. The material in this publication should be reworked to reach the public, which shows a high degree of interest in shipwrecks. After all, they have paid for the research.

None of the efforts we recommend need cost a large amount of money. The most expensive study contemplated—that of the Cuyler Harbor wrecks and the nearby lumber schooners—is proposed in the current resource management plan for Channel Islands National Park with an estimated cost of \$26,000. This cost could be reduced considerably through cooperation with the U.S. Navy and the state of California. Wreck studies should continue to emphasize staff involvement, volunteers, and cooperation with other agencies. Coordinated, sustained effort can provide more informed management of the park's maritime resources than occasional, intermittent, lavishly funded projects.

Revisions and changes as a result of new findings continued up to the instant that we delivered it to the printer. By the time it appears, we will undoubtedly have new or revised information on many of these vessels. In order to communicate, new information will be posted to Channel Islands National Park's home page on the World Wide Web.

Table 10.1. Important Unlocated Small Craft

<u>Vessel</u>	<u>Location</u>	<u>Features</u>
<i>Labor</i>	S side, ANI	1920s purse seiner
<i>Blue Sea</i>	NW side, SBI	early fishing boat
<i>Imperial</i>	S side, SCI	1910s sport-fisher
<i>Louise Ray</i>	ANI	1920s fishing boat
<i>Chappo</i>	China Harbor, SCI	1890s utility boat
<i>Helene</i>	Forney's SCI	1890s utility boat
<i>Dawn</i>	Frenchy's (?), ANI	1880s utility boat
<i>Gypsy Q</i>	Middle ANI	original Coast Guard
<i>Magic</i>	Rancho Viejo, SRI	1880s small boat

APPENDICES

The following abbreviations are used pertaining to island locations in the appendices:

C	Cuyler Harbor
OUT	Outside the park and the sanctuary
P	Pelican Cove
PB	Point Bennett
SC	Scorpion Harbor
SM	Smugglers Cove

APPENDIX A

WRECKS LISTED BY ISLAND

Wrecks Within the Park Which Have Been Located and Identified

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Gross Tonnage</u>
<i>Del Rio</i>	234477	ANI	1952	110
<i>Equator</i>	257143	ANI	1949	238
<i>Winfield Scott</i>	---	ANI	1853	1291
Grumman Avenger (plane)	---	ANI	1940s	---
<i>Dante Alighieri II</i>	236704	SBI	1938	97
<i>Billcona</i>	251907	SCI	1952	71
<i>Englyn</i>	---	SCI	1974	---
Grumman Guardian (plane)	---	SCI	1954	---
<i>Peacock</i>	MSC198	SCI	1980	370 (dspl)
<i>Santa Cruz</i>	116559	SCI	1960	45
<i>Comet</i>	126379	SMI	1911	429
<i>Cuba</i>	215771	SMI-PB	1923	3168.8
<i>J M Colman</i>	76717	SMI-PB	1905	463
<i>Aggi</i>	102136	SRI	1915	1898
<i>Broadbill</i>	215227	SRI	1966	34
<i>Chickasaw</i>	241993	SRI	1962	6131
<i>Crown of England</i>	99115	SRI	1894	2574

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Gross Tonnage</u>
<i>Dora Bluhm</i>	157091	SRI	1910	330.44
<i>Goldenhorn</i>	36279	SRI	1892	1914.78
<i>Jane L Stanford</i>	77070	SRI	1929	970
<i>W. T. & B Co. No. 60</i>	166821	SRI	1931	738

Wrecks Within the Park

Unnamed Chinese Junk	---	ANI?	1884	---
<i>Bar-bee</i>	---	ANI	---	---
<i>Dawn</i>	157169	ANI	1901	16.59
<i>Dorothy M</i>	248634	ANI	1958	18
<i>George E Billings</i>	86665	ANI	1941	1260
<i>Island Packer</i>	251991	ANI	1969	21
<i>Labor</i>	222693	ANI	1924	42
<i>Louise Ray</i>	226822	ANI	1937	52
<i>Pearl</i>	----	ANI	1891	----
<i>Pinocchio</i>	500951	ANI	1969	11
<i>San Giuseppe</i>	234348	ANI	1950	109
<i>Shamrock</i>	571693	ANI	1977	20
<i>Blue Sea</i>	217149	SBI	1928	40
<i>Patrick</i>	268135	SBI	1980	18
<i>Black Dolphin</i>	290301	SCI	1968	21
<i>Blazenka B</i>	557740	SCI	1977	26

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Gross Tonnage</u>
<i>Chappo</i>	127191	SCI	1897	5.67
<i>Cinnamon Bear</i>	260737	SCI	1966	14
<i>City of Sausalito</i>	235380	SCI	1941	133.58
<i>Corsair</i>	208712	SCI	1953	18
<i>Englyn</i>	---	SCI	1974	---
<i>Dolphin IV</i>	233428	SCI	1962	6
<i>Elaine</i>	---	SCI	1961	---
<i>Eagle</i>	---	SCI	1923	---
<i>Georgia</i>	---	SCI	1964	---
<i>Helene</i>	96325	SCI	1898	15.31
<i>Imperial</i>	212356	SCI	1936	22
<i>International I</i>	167316	SCI	1918	72
<i>Irene</i>	---	SCI	1908	---
<i>Jana Dawn</i>	277143	SCI	1978	59
<i>Joan</i>	278028	SCI	1974	12
<i>Kinkajou</i>	---	SCI	1930s	---
<i>Lion</i>	215807	SCI	1924	18
<i>Marimari</i>	501503	SCI	1969	8
<i>Nellie</i>	130865	SCI	1912	14
<i>OK</i>	---	SCI	1923	---
<i>San Buenaventura</i>	---	SCI	1858	---

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Gross Tonnage</u>
<i>Sea Lion</i>	---	SCI	1906	----
<i>Sea Lion</i>	----	SCI	1956	---
<i>Sierra</i>	262656	SCI	1972	13
<i>Swan</i>	230938	SCI	1932	20
<i>Trilogy</i>	292480	SCI	1966	7
<i>Typhoon</i>	---	SCI	1931	---
<i>Unity</i>	218553	SCI	1922	40
Unnamed Sailboat	---	SCI	1972	---
<i>Vineth</i>	239460	SCI	1961	14
<i>Wampas aka Grey Ghost</i>	---	SCI	1926	9
<i>Yukon</i>	219965	SCI	1938	43
<i>White Cap</i>	---	SCI	1966	---
<i>G W Prescott</i>	85329	SMI	1879	112.97
<i>Josie Lena</i>	239867	SMI	1962	27
<i>Leader</i>	15216	SMI	1876	9.96
<i>N B</i>	18388	SMI	1879	17.6
Nimbus 3	---	SMI?	1968	---
<i>Ruth K</i>	261271	SMI	1960	14
<i>Sea Foam</i> (fragment)	----	SMI	1907	---
<i>Surprise</i>	115499	SMI	1881	14.65
<i>W. T. Co. No. 3</i>	171619	SMI-PB	1935	264

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Gross Tonnage</u>
<i>Warrior</i>	211956	SMI	1967	82
<i>Watson A West</i>	81782	SMI	1923	818
<i>Isabella</i>	100181	SMI-C	1885	12.8
<i>Kate and Anna</i>	14376	SMI-C	1902	24.65
<i>Liberty</i>	140174	SMI-C	1895	13.41
<i>Santa Rosa</i>	115660	SMI-C	1899	30.99
<i>Legend</i>	281997	SMI-PB	1967	15.88
<i>Blue Fin</i>	229764	SRI	1944	94.5
<i>Convoy</i>	5161	SRI	1884	15.26
<i>Ella G</i>	116928	SRI	1908	25
<i>Magic</i>	141068	SRI	1899	24.3
<i>Rosemond R</i>	260203	SRI	1969	18
<i>Shasta</i> (fragment)	200714	SRI	1906	722
<i>Shoshoni</i>	278356	SRI	1967	55
<i>Standard Nut</i>	260204	SRI	1969	14
<i>Yankee Blade</i> (fragment)	---	SRI	1854	1767

Wrecks Within the Sanctuary, Outside the Park

<i>Balboa</i>	235502	ANI	1949	128
<i>Adore</i>	228159	ANI	1954	27
<i>Eros</i>	277869	ANI	1966	7
<i>Louise D</i>	252516	ANI	1955	22

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Gross Tonnage</u>
<i>Nancy B aka Nancy Lee</i>	---	ANI	1946	---
<i>San Francisco</i>	243764	ANI	1949	128
<i>Adriatic</i>	223392	SBI	1930	42
<i>Cape Argo</i>	253429	SBI	1954	38
<i>Emperor</i>	226573	SBI	1932	56
<i>H. T. P. Co. IX</i>	214093	SBI	1921	12
<i>Natoma</i>	209087	SBI	1919	26
<i>Bell</i>	---	SCI?	1901	---
<i>Chelan</i>	233743	SCI	1978	34
<i>Emil</i>	230776	SCI	1938	48
<i>Francine</i>	120988	SCI	1901	15.75
<i>Glady I</i>	262071	SCI	1975	11
<i>Golden Gate</i>	246308	SCI	1952	120
<i>Liberty</i>	256332	SCI	1973	197
<i>Marie</i>	253652	SCI	1960	13
<i>Mary</i>	92322	SCI	1968	77
<i>Maryland</i>	214495	SCI	1927	24
<i>Ruth E</i>	250964	SCI	1955	25
<i>Santa Clara</i>	---	SCI	1949	---
<i>Sea Wanderer</i>	---	SCI	1979	---
<i>Undine</i>	25277	SCI	1890	15.56

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Gross Tonnage</u>
<i>Frederick Q</i>	260183	SMI	1974	24
<i>Carol O</i>	276479	SRI	1961	13
<i>Eileen D</i>	261529	SRI	1967	14

Vessels Which Were Refloated, or are Construction Losses

<i>Beulah</i>	15639	ANI	1933	1389
<i>Liebre</i>	221073	ANI	1921	7057
<i>Aurora</i>	239980	SCI	1952	122
<i>Imperial</i>	212356	SCI	1936	22
<i>Anubis</i>	---	SMI	1908	4763
<i>Pectan</i>	212911	SMI	1914	7318
<i>Aristocratis</i>	MCE 1006	SRI	1949	7191
<i>Patria</i>	73062	SRI	1954	7217

Wrecks Whose Locations are Indefinite

<i>Seaborn</i>	259656	---	1951	36
<i>Zingara</i>	219887	ANI	1931	23
<i>Lotus</i>	141743	ANI?	1921	115
<i>Nimbus 3</i>	---	SMI?	1968	----

Wrecks Which Did Not Occur Within the Study Area

<i>Babina aka Babinda</i>	----	---	----	---
<i>Crescent City</i>	---	---	---	---

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Gross Tonnage</u>
<i>Gypsy Q</i>	254596	ANI	1955	48
<i>J F West</i>	---	---	---	---
<i>Manila Galleon</i>	---	---	---	---
<i>Seahoph</i>	---	---	---	---
<i>St Anne of the Sunset</i>	---	---	---	---
<i>Milmar</i>	256076	---	1950	44
<i>Pacific</i>	227246	---	1951	89
<i>Pan Pacific</i>	254926	---	1950	226

Wrecks Which Lack Information

<i>Fishhook</i>	---	---	1893	---
<i>Amie</i>	---	---	1884?	---
<i>Anacapa Plane</i>	---	---	---	---
<i>Friendship</i>	---	---	---	---
<i>Galileo</i>	---	---	---	---
<i>Hueneme</i>	---	---	---	---
<i>Thornton</i>	---	---	1910?	---
<i>White Star</i>	---	---	---	---

APPENDIX B

WRECKED VESSELS BY NAME

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Nature of Casualty</u>	<u>Ship Type</u>
<i>Adore</i>	228159	ANI	1954	sank	yacht
<i>Adriatic</i>	223392	SBI	1930	sank	fishing
<i>Aggi</i>	102136	SRI	1915	stranded	freighter
<i>Amie</i>	---	---	1884?	---	---
Anacapa Plane	---	---	---	---	---
<i>Anubis*</i>	---	SMI	1908	stranded	freighter
<i>Aristocratis*</i>	MCE1006	SRI	1949	stranded	freighter
<i>Aurora</i>	239980	SCI	1952	burned (rebuilt)	other
<i>Babina aka Babinda</i>	---	---	---	---	---
<i>Balboa</i>	235502	---	1949	burned	fishing
<i>Bar-bee</i>	---	ANI	---	---	rum runner
<i>Bell</i>	---	SCI	1901	capsized	fishing
<i>Beulah*</i>	15639	ANI	1933	stranded	freighter
<i>Billcona</i>	251907	SCI	1952	stranded	tug
<i>Black Dolphin</i>	290301	SCI	1968	stranded	tour
<i>Blazenka B</i>	557740	SCI	1977	burned	fishing
<i>Blue Fin</i>	229764	SRI	1944	stranded	government
<i>Blue Sea</i>	217149	SBI	1928	stranded	fishing
<i>Broadbill</i>	215227	SRI	1966	stranded	fishing

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Nature of Casualty</u>	<u>Ship Type</u>
<i>Cape Argo</i>	253429	SBI	1954	burned	fishing
<i>Carol O</i>	276479	SRI	1961	burned	fishing
<i>Chappo</i>	127191	SCI	1897	stranded	---
<i>Chelan</i>	233743	SCI	1978	collision	fishing
<i>Chickasaw</i>	241993	SRI	1962	stranded	freighter
<i>Cinnamon Bear</i>	260737	SCI	1966	burned	fishing
Chinese Junk	---	ANI?	1884	stranded	fishing
<i>City of Sausalito</i>	235380	SCI	1941	burned	other
<i>Comet</i>	126379	SMI	1911	stranded	lumber
<i>Convoy</i>	5161	SRI	1884	stranded	sealer
<i>Corsair</i>	208712	SCI	1953	stranded	yacht
<i>Crescent City</i>	---	---	---	---	---
<i>Crown of England</i>	99115	SRI	1894	stranded	freighter
<i>Cuba</i>	215771	SMI-PB	1923	stranded	pass-freight
<i>Dante Alighieri II</i>	236704	SBI	1938	stranded	fishing
<i>Dawn</i>	157169	ANI	1901	stranded	lob sup boat
<i>Del Rio</i>	234477	ANI	1952	burned	fishing
<i>Dolphin IV</i>	233428	SCI	1962	burned	fishing
<i>Dora Bluhm</i>	157091	SRI	1910	stranded	lumber
<i>Dorothy M</i>	248634	ANI	1958	stranded	fishing
<i>Eagle</i>	---	SCI	1923	---	fishing
<i>Eileen D</i>	261529	SRI	1967	capsized	fishing

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Nature of Casualty</u>	<u>Ship Type</u>
<i>Ella G</i>	116928	SRI	1908	stranded	sealer
<i>Elaine</i>	---	SCI	1961	stranded	yacht
<i>Emil</i>	230776	SCI	1938	sank	fishing
<i>Emperor</i>	226573	---	1932	sank	fishing
<i>Englyn</i>	---	SCI	1974	stranded	yacht
<i>Equator</i>	257143	ANI	1949	stranded	fishing
<i>Eros</i>	277869	ANI	1966	sank	yacht
<i>Fishhook</i>	---	---	1893	---	---
<i>Francine</i>	120988	SCI	1901	sank	guano
<i>Frederick Q</i>	260183	SMI	1974	sank	fishing
<i>Friendship</i>	---	---	---	---	---
<i>G W Prescott</i>	85329	SMI	1879	stranded	lumber
<i>Galileo</i>	---	---	---	---	---
<i>George E Billings</i>	---	ANI	1941	burned	lumber /fish barge
<i>Georgia</i>	---	SCI	1964	sank	fishing
<i>Glady I</i>	262071	SCI	1975	sank	fishing
<i>Golden Gate</i>	246308	SCI	1952	sank	fishing
<i>Goldenhorn</i>	36279	SRI	1892	stranded	freighter
Grumman Avenger (plane)	---	ANI	1940s	ditched?	government
Grumman Guardian (plane)	---	SCI	1954	ditched	government
<i>Gypsy Q</i>	254596	---	1955	sank	fishing

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Nature of Casualty</u>	<u>Ship Type</u>
<i>H. T. P. Co. IX</i> freighter	214093	SBI	1921	burned	local
<i>Helene</i>	96325	SCI	1898	stranded	guano
<i>Hueneme</i>	---	---	---	---	---
<i>Imperial</i>	212356	SCI	1936	stranded (rebuilt)	fishing
<i>International 1</i>	167316	SCI	1918	stranded	barge
<i>Irene</i>	---	SCI	1908	stranded	other
<i>Isabella</i>	100181	SMI-C	885	stranded	sealer
<i>Island Packer</i>	251991	ANI	1969	stranded	tour boat
<i>J F West</i>	---	---	---	---	---
<i>J M Colman</i>	76717	SMI-PB	1905	stranded	lumber
<i>Jana Dawn</i>	277143	SCI	1978	destroyed	fishing
<i>Jane L Stanford</i>	77070	SRI	1929	demolition	lumber
<i>Joan</i>	278028	SCI	1974	stranded	fishing
<i>Josie Lena</i>	239867	SMI	1962	stranded	fishing
<i>Kate and Anna</i>	14376	SMI-C	1902	stranded	sealer
<i>Kinkajou</i>	---	SCI	1930s	sank	yacht
<i>Labor</i>	222693	ANI	1924	stranded	fishing
<i>Leader</i>	15216	SMI	1876	stranded	sealer
<i>Legend</i>	281997	SMI-PB	1967	stranded	yacht
<i>Liberty</i>	140174	SMI-C	1895	stranded	isl sup boat
<i>Liberty</i>	256332	SCI	1973	sank	fishing

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Nature of Casualty</u>	<u>Ship Type</u>
<i>Liebre*</i>	221073	ANI	1921	stranded	oil tanker
<i>Lion</i>	215807	SCI	1924	stranded	fishing
<i>Liverpool</i>	---	---	---	---	---
<i>Lotus</i>	141723	---	1922	burned	passenger
<i>Louise D</i>	252516	ANI	1955	burned	fishing
<i>Louise Ray</i>	226822	ANI	1937	stranded	fishing
<i>Magic</i>	141068	SRI	1899	stranded	lob sup boat
<i>Manila Galleon</i>	---	---	---	---	---
<i>Marie</i>	253652	SCI	1960	sank	charter
<i>Marimari</i>	501503	SCI	1969	stranded	yacht
<i>Mary</i>	92322	SCI	1968	sank	fishing
<i>Maryland</i>	214495	SCI	1927	burned	fishing
<i>Milmar</i>	256076	OUT	1950	burned	fishing
<i>Natoma</i>	209087	SBI	1919	burned	fishing
<i>N B</i>	18388	SMI	1879	stranded	sealer
<i>Nancy B aka Nancy Lee</i>	---	ANI	1946	sank	fishing
<i>Nellie</i>	130865*	SCI	1912	stranded	tour
Nimbus 3 (satellite)	---	SMI?	1968	sank	weather satellite
<i>OK</i>	---	SCI	1923	---	fishing
<i>Pacific</i>	227246	OUT	1951	sank	fishing
<i>Pan Pacific</i>	254926	OUT?	1950	sank	fishing

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Nature of Casualty</u>	<u>Ship Type</u>
<i>Patria*</i>	73062	SRI	1954	stranded	freighter
<i>Patrick</i>	268135	SBI	1980	stranded	fishing
<i>Peacock</i>	MSC 198	SCI	1980	salvaged	government
<i>Pearl</i>	---	ANI	1891	stranded	sealer
<i>Pectan*</i>	212911	SMI	1914	stranded	oil tanker
<i>Pinocchio</i>	500951	ANI	1969	stranded	yacht
<i>Rosemond R</i>	260203	SRI	1969	stranded	fishing
<i>Ruth E</i>	250964	SCI	1955	burned	fishing
<i>Ruth K</i>	261271	SMI	1960	stranded	fishing
<i>San Buenaventura</i>	---	SCI	1858	sank	other
<i>San Francisco</i>	243764	ANI	1949	burned	fishing
<i>San Giuseppe</i>	234348	ANI	1950	burned	fishing
<i>Santa Clara</i>	---	SCI	1949	---	fishing
<i>Santa Cruz</i>	116559	SCI	1960	stranded	isl sup boat
<i>Santa Rosa</i>	115660	SMI-C	1899	stranded	isl sup boat
<i>Sea Foam</i> (fragment)	---	SMI	1907	fragment	other
<i>Sea Lion</i>	---	SCI	1906	stranded	fishing
<i>Sea Lion</i>	---	SCI	1956	sank	other
<i>Sea Wanderer</i>	---	SCI	1979	sank	fishing
<i>Seaborn</i>	259656	---	1951	collision	tug
<i>Seahoph</i>	---	---	---	---	---
<i>Shamrock</i>	571693	ANI	1977	burned	yacht

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Nature of Casualty</u>	<u>Ship Type</u>
<i>Shasta</i> (fragment)	200714	SRI	1906	stranded	other
<i>Shoshoni</i>	278356	SRI	1967	stranded	fishing
<i>Sierra</i>	262656	SCI	1972	stranded	fishing
<i>St Anne of the Sunset</i>	---	---	---	---	---
<i>Standard Nut</i>	260204	SRI	1969	stranded	fishing
<i>Thornton</i>	----	---	1910?	---	---
<i>Trilogy</i>	292480	SCI	1966	stranded	yacht
<i>Typhoon</i>	---	SCI	1931	stranded	yacht
<i>Undine</i>	25277	SCI	1890	capsized	---
<i>Unity</i>	218553	SCI	1922	burned	fishing
Unnamed Sailboat	----	SCI	1972	sank	yacht
<i>Vineth</i>	239460	SCI	1961	stranded	fishing
<i>W. T. Co. No. 3</i>	171619	SMI	1935	sank	barge
<i>Wampas</i> aka <i>Grey Ghost</i>	---	SCI	1926	stranded	rum runner
<i>Warrior</i>	211956	SMI	1967	sank	fishing
<i>Watson A West</i>	81782	SMI	1923	stranded	lumber
<i>White Cap</i>	---	SCI	1966	---	---
<i>White Star</i>	---	---	---	---	---
<i>Winfield Scott</i>	----	ANI	1853	stranded	passenger
<i>W.T. & B. Co. No. 60</i>	166821	SRI	1931	demolition	barge
<i>Yankee Blade</i> (fragment)	---	SRI	1854	stranded	passenger
<i>Yukon</i>	219965	SCI	1938	fire-collision	fishing

<u>Ship Name</u>	<u>Official Number</u>	<u>Island</u>	<u>Year</u>	<u>Nature of Casualty</u>	<u>Ship Type</u>
<i>Zingara</i>	219887	ANI	1931	burned	yacht

*refloated after stranding

APPENDIX C

VESSELS LISTED BY GROSS TONNAGE

<u>Ship Name</u>	<u>Tonnage</u>	<u>Island</u>
<i>Chappo</i>	5.67	SCI
<i>Dolphin IV</i>	6	SCI
<i>Eros</i>	7	ANI
<i>Trilogy</i>	7	SCI
<i>Marimari</i>	8	SCI
<i>Wampas aka Grey Ghost</i>	9	SCI
<i>Leader</i>	9.96	SMI
<i>Glady I</i>	11	SCI
<i>Pinocchio</i>	11	ANI
<i>H. T. P. Co. IX</i>	12	SBI
<i>Joan</i>	12	SCI
<i>Isabella</i>	12.8	SMI-C
<i>Carol O</i>	13	SRI
<i>Marie</i>	13	SCI
<i>Sierra</i>	13	SCI
<i>Liberty</i>	13.41	SMI-C
<i>Cinnamon Bear</i>	14	SCI
<i>Dawn</i>	14	ANI
<i>Eileen D</i>	14	SRI
<i>Nellie</i>	14	SCI

<u>Ship Name</u>	<u>Tonnage</u>	<u>Island</u>
<i>Ruth K</i>	14	SMI
<i>Standard Nut</i>	14	SRI
<i>Vineth</i>	14	SCI
<i>Surprise</i>	14.65	SMI
<i>Convoy</i>	15.26	SRI
<i>Helene</i>	15.31	SCI
<i>Undine</i>	15.56	---
<i>Francine</i>	15.75	SCI
<i>Legend</i>	15.88	SMI-PB
<i>Dawn</i>	16.59	ANI
<i>N B</i>	17.6	SMI
<i>Corsair</i>	18	SCI
<i>Dorothy M</i>	18	ANI
<i>Lion</i>	18	SCI
<i>Patrick</i>	18	SBI
<i>Rosemond R</i>	18	SRI
<i>Shamrock</i>	20	ANI
<i>Swan</i>	20	SCI
<i>Black Dolphin</i>	21	SCI
<i>Island Packer</i>	21	ANI
<i>Imperial</i>	22	SCI
<i>Louise D</i>	22	ANI
<i>Zingara</i>	23	ANI
	214	

<u>Ship Name</u>	<u>Tonnage</u>	<u>Island</u>
<i>Frederick Q</i>	24	SMI
<i>Maryland</i>	24	SCI
<i>Magic</i>	24.3	SRI
<i>Kate and Anna</i>	24.65	SMI-C
<i>Ella G</i>	25	SRI
<i>Ruth E</i>	25	SCI
<i>Blazenka B</i>	26	SCI
<i>Natoma</i>	26	SBI
<i>Adore</i>	27	SRI
<i>Josie Lena</i>	27	SMI
<i>Santa Rosa</i>	30.99	SMI-C
<i>Chelan</i>	34	SCI
<i>Broadbill</i>	34	SRI
Chinese Junk	35 (approx)	ANI?
<i>Seaborn</i>	36	---
<i>Cape Argo</i>	38	SBI
<i>Blue Sea</i>	40	SBI
<i>Unity</i>	40	SCI
<i>Adriatic</i>	42	SBI
<i>Labor</i>	42	ANI
<i>Yukon</i>	43	SCI
<i>Milmar</i>	44	OUT
<i>Santa Cruz</i>	45	SCI

<u>Ship Name</u>	<u>Tonnage</u>	<u>Island</u>
<i>Emil</i>	48	SCI
<i>Gypsy Q</i>	48	---
<i>Louise Ray</i>	52	ANI
<i>Shoshoni</i>	55	SRI
<i>Emperor</i>	56	SBI
<i>Jana Dawn</i>	59	SCI
<i>Billcona</i>	71	SCI
<i>International I</i>	72	SCI
<i>Mary</i>	77	SCI
<i>Warrior</i>	82	SMI
<i>Pacific</i>	89	OUT
<i>Blue Fin</i>	94.5	SRI
<i>Dante Alighieri II</i>	97	SBI
<i>San Giuseppe</i>	109	ANI
<i>Del Rio</i>	110	ANI
<i>G W Prescott</i>	112.97	SMI
<i>Lotus</i>	115	ANI?
<i>Golden Gate</i>	120	SCI
<i>Aurora</i>	122	SCI
<i>Balboa</i>	128	---
<i>San Francisco</i>	128	ANI
<i>City of Sausalito</i>	133.58	SCI
<i>Liberty</i>	197	SCI?
	216	

<u>Ship Name</u>	<u>Tonnage</u>	<u>Island</u>
<i>Pan Pacific</i>	226	ANI
<i>Equator</i>	238	ANI
<i>W. T. Co. No. 3</i>	264	SMI
<i>Dora Bluhm</i>	330.44	SRI
<i>Peacock</i>	370 (dspl)	SCI
<i>Comet</i>	429	SMI
<i>J M Colman</i>	463	SMI-PB
<i>Shasta</i> (fragment)	722	SRI
<i>W.T. & B. Co. No. 60</i>	738	SRI
<i>Watson A West</i>	818	SMI
<i>Jane L Stanford</i>	970	SRI
<i>George E Billings</i>	1260	ANI?
<i>Winfield Scott</i>	1291	ANI
<i>Beulah*</i>	1389	ANI
<i>Yankee Blade</i> (fragment)	1767	SRI
<i>Aggi</i>	1898	SRI
<i>Goldenhorn</i>	1914.78	SRI
<i>Crown of England</i>	2574	SRI
<i>Cuba</i>	3168.8	SMI-PB
<i>Anubis*</i>	4763	SMI
<i>Chickasaw</i>	6131	SRI
<i>Liebre*</i>	7057	ANI
<i>Aristocratis*</i>	7191	SRI

<u>Ship Name</u>	<u>Tonnage</u>	<u>Island</u>
<i>Patria*</i>	7217	SRI
<i>Pectan*</i>	7318	SMI

* These vessels were refloated after grounding.

The following vessels' tonnage are unknown or are irrelevant to the report:

Grumman Avenger (plane)	---	ANI
Grumman Guardian (plane)	---	SCI
<i>Eagle</i>	---	SCI
<i>Irene</i>	---	SCI
<i>Nancy B aka Nancy Lee</i>	---	ANI
<i>OK</i>	---	SCI
<i>Sea Lion</i>	---	SCI
<i>Typhoon</i>	---	SCI
<i>Amie</i>	---	---
Anacapa Plane	---	---
<i>Babina aka Babinda</i>	---	---
<i>Bar-bee</i>	---	ANI
<i>Bell</i>	---	---
<i>Crescent City</i>	--	---
<i>Elaine</i>	---	SCI
<i>Englyn</i>	---	SCI
<i>Fishhook</i>	---	---
<i>Friendship</i>	---	---

<u>Ship Name</u>	<u>Tonnage</u>	<u>Island</u>
<i>Galileo</i>	---	---
<i>Georgia</i>	---	SCI
<i>Hueneme</i>	---	---
<i>J F West</i>	---	---
<i>Kinkajou</i>	---	SCI
<i>Liberty</i>	---	SCI
<i>Manila Galleon</i>	---	---
Nimbus 3	---	SMI?
<i>Pearl</i>	---	ANI
<i>San Buenaventura</i>	---	SCI
<i>Santa Clara</i>	---	SCI
<i>Sea Foam</i> (fragment)	---	SMI
<i>Sea Lion</i>	---	SCI
<i>Sea Wanderer</i>	---	SCI
<i>Seahoph</i>	---	---
<i>St Anne of the Sunset</i>	---	---
<i>Thornton</i>	---	---
<i>Undine</i>	---	SCI
Unnamed Sailboat	---	---
<i>White Cap</i>	---	SCI-SM
<i>White Star</i>	---	---

APPENDIX D

VESSELS LISTED BY YEAR

<u>Ship Name</u>	<u>Official Number</u>	<u>Year</u>	<u>Island</u>	<u>Ship Type</u>
<i>Winfield Scott</i>	---	1853	ANI	passenger
<i>Yankee Blade</i> (fragment)	---	1854	SRI	passenger
<i>San Buenaventura</i>	---	1858	SCI	other
<i>Leader</i>	15216	1876	SMI	sealer
<i>G W Prescott</i>	85329	1879	SMI	lumber
<i>N B</i>	18388	1879	SMI	sealer
<i>Surprise</i>	115499	1881	SMI	sealer
<i>Amie</i>	---	1884?	---	---
<i>Convoy</i>	5161	1884	SRI	sealer
Chinese Junk	---	1884	ANI	fishing
<i>Isabella</i>	100181	1885	SMI-C	sealer
<i>Undine</i>	25277	1890	SCI	---
<i>Pearl</i>	---	1891	ANI	sealer
<i>Goldenhorn</i>	36279	1892	SRI	freighter
<i>Fishhook</i>	---	1893	---	---
<i>Crown of England</i>	99115	1894	SRI	freighter
<i>Liberty</i>	140174	1895	SMI-C	isl sup boat
<i>Chappo</i>	127191	1897	SCI	----
<i>Helene</i>	96325	1898	SCI	guano

<u>Ship Name</u>	<u>Official Number</u>	<u>Year</u>	<u>Island</u>	<u>Ship Type</u>
<i>Magic</i>	141068	1899	SRI	lob sup boat
<i>Santa Rosa</i>	115660	1899	SMI-C	isl sup boat
<i>Bell</i>	---	1901	SCI	fishing
<i>Dawn</i>	157169	1901	ANI	lob sup boat
<i>Francine</i>	120988	1901	SCI	guano
<i>Kate & Anna</i>	14376	1902	SMI-C	sealer
<i>J M Colman</i>	76717	1905	SMI-PB	lumber
<i>Sea Lion</i>	---	1906	SCI	fishing
<i>Shasta</i> (fragment)	200714	1906	SRI	other
<i>Sea Foam</i> (fragment)	---	1907	SMI	other
<i>Anubis*</i>	---	1908	SMI	freighter
<i>Ella G</i>	116928	1908	SRI	sealer
<i>Irene</i>	---	1908	SCI	other
<i>Thornton</i>	---	1910?	---	---
<i>Dora Bluhm</i>	157091	1910	SRI	lumber
<i>Comet</i>	126379	1911	SMI	lumber
<i>Nellie</i>	130865	1912	SCI	tour
<i>Pectan*</i>	212911	1914	SMI	oil tanker
<i>Aggi</i>	102136	1915	SRI	freighter
<i>International I</i>	167316	1918	SCI	barge
<i>Natoma</i>	209087	1919	SBI	fishing
<i>H. T. P. Co. IX</i>	214093	1921	SBI	local freighter

<u>Ship Name</u>	<u>Official Number</u>	<u>Year</u>	<u>Island</u>	<u>Ship Type</u>
<i>Liebre*</i>	221073	1921	ANI	oil tanker
<i>Lotus</i>	141723	1921	---	passenger
<i>Unity</i>	218553	1922	SCI	fishing
<i>Cuba</i>	215771	1923	SMI-PB	pass-freight
<i>Eagle</i>	---	1923	SCI	fishing
<i>OK</i>	---	1923	SCI	fishing
<i>Watson A West</i>	81782	1923	SMI	lumber
<i>Labor</i>	222693	1924	ANI	fishing
<i>Lion</i>	215807	1924	SCI	fishing
<i>Wampas aka Grey Ghost</i>	--	1926	SCI	rum runner
<i>Maryland</i>	214495	1927	SCI	fishing
<i>Blue Sea</i>	217149	1928	SBI	fishing
<i>Jane L Stanford</i>	77070	1929	SRI	lumber
<i>Adriatic</i>	223392	1930	SBI	fishing
<i>Typhoon</i>	--	1931	SCI	yacht
<i>W.T. & B. Co. No. 60</i>	--	1931	SRI	--
<i>Zingara</i>	219887	1931	ANI	yacht
<i>Emperor</i>	226573	1932	---	fishing
<i>Swan</i>	230938	1932	SCI	yacht
<i>Beulah*</i>	15639	1933	ANI	freighter
<i>W. T. Co. No. 3</i>	171619	1935	SMI	barge
<i>Imperial</i>	212356	1936	SCI	fishing

<u>Ship Name</u>	<u>Official Number</u>	<u>Year</u>	<u>Island</u>	<u>Ship Type</u>
<i>Louise Ray</i>	226822	1937	ANI	fishing
<i>Dante Alighieri II</i>	236704	1938	SBI	fishing
<i>Emil</i>	230776	1938	SCI	fishing
<i>Yukon</i>	219965	1938	SCI	fishing
<i>George E Billings</i>	---	1941	ANI	lumber
<i>City of Sausalito</i>	235380	1941	SCI	other
<i>Blue Fin</i>	229764	1944	SRI	government
<i>Nancy B aka Nancy Lee</i>	---	1946	ANI	fishing
<i>Aristocratis</i>	MCE 100	1949	SRI	freighter
<i>Balboa</i>	235502	1949	---	fishing
<i>Equator</i>	257143	1949	ANI	fishing
<i>San Francisco</i>	243764	1949	ANI	fishing
<i>Santa Clara</i>	---	1949	SCI	fishing
<i>Milmar</i>	256076	1950	OUT	fishing
<i>San Giuseppe</i>	234348	1950	ANI	fishing
<i>Pan Pacific</i>	---	1950	ANI	fishing
<i>Pacific</i>	227246	1951	OUT	fishing
<i>Seaborn</i>	259656	1951	---	tug
<i>Aurora</i>	239980	1952	SCI	other
<i>Billcona</i>	251907	1952	SCI	tug
<i>Del Rio</i>	234477	1952	ANI	fishing
<i>Golden Gate</i>	246308	1952	SCI	fishing

<u>Ship Name</u>	<u>Official Number</u>	<u>Year</u>	<u>Island</u>	<u>Ship Type</u>
<i>Corsair</i>	208712	1953	SCI	yacht
<i>Adore</i>	228159	1954	SRI	yacht
<i>Cape Argo</i>	253429	1954	SBI	fishing
Grumman Guardian (plane)	---	1954	SCI	government
<i>Patria*</i>	73062	1954	SRI	freighter
<i>Gypsy Q</i>	254596	1955	---	fishing
<i>Louise D</i>	252516	1955	ANI	fishing
<i>Ruth E</i>	250964	1955	SCI	fishing
<i>Sea Lion</i>	---	1956	SCI	---
<i>Dorothy M</i>	248634	1958	ANI	fishing
<i>Marie</i>	253652	1960	SCI	charter
<i>Ruth K</i>	261271	1960	SMI	fishing
<i>Santa Cruz</i>	116559	1960	SCI	isl sup boat
<i>Carol O</i>	276479	1961	SRI	fishing
<i>Elaine</i>	---	1961	SCI	---
<i>Vineth</i>	239460	1961	SCI	fishing
<i>Chickasaw</i>	241993	1962	SRI	freighter
<i>Dolphin IV</i>	233428	1962	SCI	fishing
<i>Josie Lena</i>	239867	1962	SMI	fishing
<i>Georgia</i>	---	1964	SCI	fishing
<i>Broadbill</i>	215227	1966	SRI	fishing
<i>Cinnamon Bear</i>	260737	1966	SCI	fishing

<u>Ship Name</u>	<u>Official Number</u>	<u>Year</u>	<u>Island</u>	<u>Ship Type</u>
<i>Eros</i>	277869	1966	ANI	yacht
<i>Trilogy</i>	292480	1966	SCI	yacht
<i>White Cap</i>	---	1966	SCI-SM	---
<i>Eileen D</i>	261529	1967	SRI	fishing
<i>Legend</i>	281997	1967	SMI-PB	yacht
<i>Shoshoni</i>	278356	1967	SRI	fishing
<i>Warrior</i>	211956	1967	SMI	fishing
<i>Black Dolphin</i>	290301	1968	SCI	tour
<i>Mary</i>	92322	1968	SCI	fishing
Nimbus 3	---	1968	SMI?	weather satellite
<i>Island Packer</i>	251991	1969	ANI	tour boat
<i>Marimari</i>	501503	1969	SCI	yacht
<i>Pinocchio</i>	500951	1969	ANI	yacht
<i>Rosemund R</i>	260203	1969	SRI	fishing
<i>Standard Nut</i>	260204	1969	SRI	fishing
Unnamed Sailboat	---	1972	SCI-SM	yacht
<i>Sierra</i>	262656	1972	SCI	fishing
<i>Liberty</i>	---	1973	SCI	---
<i>Englyn</i>	---	1974	SCI	yacht
<i>Frederick Q</i>	260183	1974	SMI	fishing
<i>Joan</i>	278028	1974	SCI	fishing
<i>Glady I</i>	262071	1975	SCI	fishing

<u>Ship Name</u>	<u>Official Number</u>	<u>Year</u>	<u>Island</u>	<u>Ship Type</u>
<i>Blazenka B</i>	557740	1977	SCI	fishing
<i>Shamrock</i>	571693	1977	ANI	yacht
<i>Chelan</i>	233743	1978	SCI	fishing
<i>Jana Dawn</i>	277143	1978	SCI	fishing
<i>Sea Wanderer</i>	---	1979	SCI	fishing
<i>Patrick</i>	268135	1980	SBI	fishing
<i>Peacock</i>	MSC 198	1980	SCI	government

No data are available for those listed below.

<i>Anacapa Plane</i>	---	---	---	---
<i>Friendship</i>	---	---	---	---
<i>Galileo</i>	---	---	---	---
<i>Grumman Avenger</i>	---	1940s	---	---
<i>Hueneme</i>	---	---	---	---
<i>Kinkajou</i>	---	1930s	SCI-P	---
<i>White Star</i>	---	---	---	---
<i>Bar-bee</i>	---	---	ANI	---
<i>J F West</i>	---	---	---	---
<i>Babina aka Babinda</i>	---	---	---	---
<i>Crescent City</i>	---	---	---	---
<i>Seahoph</i>	---	---	---	---
<i>St Anne of the Sunset</i>	---	---	---	---
<i>Manila Galleon</i>	---	---	---	---

APPENDIX E
SCHOONER "C O M E T"

CONTRACT NUMBER 49:

Contract and specifications for building a three masted schooner at Port Blakely, W.T.,
between the following parties:

F. P. Hooper, J. A. Hooper, C. Lass, parties of the first part and W. G. Hall of the second
part.

Said vessel to be of the following dimensions:

DIMENSIONS:

One hundred and thirty-six ft. keel, thirty-four ft. moulded beam and eleven ft. deep.

TIMBER:

Outside of stem, rudder post, bitts, (with the exception of pawl bitt) cleats, cavils, jaws to
gaff and booms, trestle trees, cross-trees, pin rail in rigging and windlass to be of hardwood. The
balance of wood, unless specified, to be of yellow fir.

KEEL:

To be 16 x 17 inches, and 14 inches of keel and shoe below garboards.

FRAME:

Frame to be spaced 29 inches from centers and sided ten inches. Moulded 13 inches at keel
and 6½ inches at deck, with a stanchion on every frame.

KEELSONS:

Main keelson 16" x 20"; sister keelsons 14" x 18". Bed piece of sufficient depth to come to top of sister keelsons and sided 14".

CENTER CASE:

Center case to have an 8" opening, plank of case to be 8" thick. Case coppered to top of Keelson.

DECK FRAME:

Deck beams to side 14" and mould 11 inches. To be secured to a clamp 11 inches in thickness, said clamp to be worked onto frame and bolted with 2-1" bolts in each and every frame, driven from outside and clinched. Beams to be let into said clamp 1". There shall be a piece of timber dovetailed between all the beams, within 1" of the top of the beam and flush with clamp, with the bolts in every piece driven from the outside and clinched.

HANGING KNEES:

Deck frame to have a hanging knee to each beam, where practicable. Knees to be fastened with 7/8" inch iron. Throat bolts one iron [*sic*].

CEILING:

Ceiling out of turn of bilge four inches, the lower strake of thick ceiling 10" and graduated in three strakes to 8", from thence to clamps 8", the two upper strakes scarphed. All thick ceiling edge bolted.

PLANKING:

Garboards 7" in thickness and graduated in 3 strakes to thickness of bottom plank, which shall be 4", wales 5", planksheer 5" in thickness; washboard flush with wales. Bulkheads 2" thick, rail 5", monkey chock and rail whole length of vessel.

DECK:

Deck 4 x 4"; quarter deck and housetop 3" x 3".

FASTENING:

Keel, keelsons, stem, stern post and deadwood to be fastened with 1¼" and 1½" iron. There shall be breast hooks and pointers forward and aft; also a breast hook above and below lumber port. Hooks and pointers fastened with 1" iron. Thick ceiling square fastened with 7⁄8" iron to bottom of hanging knees, from thence to clamps ¾" iron, enough driven from the inside to work the plank, the balance driven from the outside and clinched.

OUTBOARD FASTENING:

Garboards to be edge bolted to the keel. Planking to be worked with composition spikes to the wales, thence to plank sheer galvanized iron. Planking to be square fastened with 1¼" treenails, driven through to make square fastening and wedged on both ends. Treenails from turn of bilge to planksheer Locust. Fastenings for deck, housetop, bulwarks and stern to be galvanized, all other fastenings used in construction of said vessel, not specified as galvanized, to be of black iron.

SALT:

Vessel to be salted from lower edge of wales to deck.

CAULKING:

Six threads of oakum in garboards and hawsed, from thence to plank sheer four threads and hawsed, deck and housetop two threads. Center case six threads and hawsed. Seams on bottom cemented to water line, from thence to plank sheer white leaded. Deck pitched. Center case, two lower seams, cemented, the balance white leaded.

PORTS:

Vessel to have bow and stern ports.

FORECASTLE & CABIN:

Forecastle and cabin to be on deck, with water-closet and stationary wash-bowl complete. Forward house to be adapted for donkey engine.

PAINTING:

Bottom two coats of Tar & Monsons copper paint, topsides and deck work two coats of paint. Spars oiled.

STEERING GEAR, ETC:

Vessel to have composition rudder braces, diamond cut screw steering gear, 24" windlass purchase. #3 capstan and patent traveler for spanker, spars to be in proportion to hull and all iron of the best quality and workmanship.

SAILS, RIGGING, ETC:

Standing rigging of wire, 4 shrouds each side for fore and mainmasts and 3 each side for mizzen mast 4" wire. Main jib stays double 4½" wire. Topmast backstays 3¼", middle and flying jib stays of wire. Halliards, throat and peak for foresail and mainsail to be 3½", the balance of running rigging to be in proportion to its use.

BLOCKS:

All blocks custom made. Throat, peak and jib halyards 15" steel rollers, the balance of the blocks in proportion. Boom tackle, reef tackle, watch tackle and cargo purchase complete.

BOWSPRIT:

Outboard on bottom 19', diam and 16", outer bobstay 16½", inner bobstay 19¼" and 18¼", athwartships 9½" flat.

JIBBOOM:

Diam in cap 14", diam in hounds 13½", from cap to hounds 14½', from hounds to outer band 15', diam hounds 8½" outside, diam of grommet 12" clear, diam. outer band 7¼" clear, outer jibstay hole 4', inside of outer band. Topmast stay hole 18" outside of band. Pole 5', sliding iron 9'.

FOREMAST:

Diam 24", spider 20½", mast head 11', squares 16½" and 13½", wythes 13⅞" and 14½".

MAIN MAST:

Length from top main rail to cap 78', diam 23", spider 19", mast head 11', squares 15½" and 12½", wythes 12⅞" and 13½".

MISEN MAST:

Diam 21½", spider 18", mast head 11', squares 15½" and 12½". Wythes 12⅞" and 13½".

TOP MASTS:

Fore topmast length 51', diam in cap 13", hounds 10½" and 7", grommets 9" and 5½", pole 8 + 5 = 13'.

Main and mizen topmasts length 51', diam in cap 12", hounds 10" and 6¾", grommets 8½" and 5½", pole 8+5=13'.

BOOMS:

Boom for jib 37', diam 8½", topping lift 7¾" outside, clew 8", outer end 7½", sheet 8⅛".

Fore and main booms length 39' 6", diam 10½", topping lift 9¾" outside, sheet 10¼", clew 10".

Spanker boom length 50', sheet 11½", clew 9½", topping lift 8" outside.

GAFFS:

Fore and main gaffs 37', diam 8¾", bands 8⅞", 8", 6⅝" and 5".

Spanker gaff 34', diam 8¾", bands 8⅞", 8", 6⅝", and 5".

HEEL HOOPS, ETC:

Heel hoops 22½", 21½", 20". Fore sheet ring bolt 14¾" W & W.

Main sheet traveler 18" x 18" to key fore and aft.

RAKE:

Fore and main masts rake ¼".

Misen masts rake ⅞".

SAILS:

Sails to be of cotton duck, spanker, mainsail, foresail and jib to be No. 1, the balance of sails to be in proportion to their size and use.

CHAINS, ANCHORS, ETC.:

One 1800 lb. anchor, one 1550 lb. anchor, one 400 lb. kedge, 60 fthms. of 1 $\frac{3}{8}$ " chain; 60 fthms. 1 $\frac{1}{4}$ " chain; 120 fthms. of 7" hawser, 120 fthms. 5"; 60 fthms. 6" wharf fast and one coil of 3 $\frac{1}{2}$ " running line; chain cat stoppers and shank painters, tarpaulins and mast coats, galley fixtures, cabin furniture, carpet, table, chairs, clock and crockery. Lamps, cabin and state room lamps, side lights, mast head lights, galley and forecastle lamps. One spirit compass and one of brass. Patent log, sounding lead and line. 1000 gallons of water casks. One 18' boat and oars, rigging screws marline spikes and ship's tools.

Vessel to be fitted for sea for a coasting voyage, with the exception of provisions and bedding. Vessel to be launched on or before the 20th day of September 1886.

In consideration of the fulfillment of the foregoing contract, the parties of the first part agree to pay to the party of the second part, the sum of Thirty Thousand Dollars (\$30,000) in U.S. Gold Coin, in the following payments, viz:

\$5000	On signing contract
7500	On July 10th, 1886
7500	On Aug. 10th, 1886
10000	When vessel is delivered at Port Blakely, W.T.

(Signed) F. P. & J. A. Hooper, 2/3rds

C. F. S. Lass, 1/3rd

(Signed)

W. G. Hall,

Party of second part.

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The Submerged Cultural Resources Unit was established in 1980 to conduct research on submerged cultural resources throughout the National Park System with an emphasis on historic shipwrecks. One of the unit's primary responsibilities is to disseminate the results of research to National Park Service managers, as well as the professional community. A report series has been initiated in order to fulfill this responsibility. It has been incorporated into an umbrella series entitled Southwest Cultural Resources Center and Intermountain Cultural Resource Centers Professional Papers. The following are the categories:

Submerged Cultural Resources Assessment

First line document that consists of a brief literature search, an overview of the maritime history and the known or potential underwater sites in the park, and preliminary recommendations for long-term management. It is designed to have immediate application to protection and interpretation needs and to become a source document for a park's Submerged Cultural Resources Management Plan.

Submerged Cultural Resources Survey

Comprehensive examination of blocks of park lands for the purpose of locating and identifying as much of the submerged cultural resources base as possible. A comprehensive literature search would most likely be a part

of the Phase I report but, in some cases, may be postponed until Phase II.

Phase I -- Reconnaissance of target areas with remote sensing and visual survey techniques to establish location of any archeological sites or anomalous features that may suggest the presence of archeological sites.

Phase II -- Evaluation of archeological sites or anomalous features derived from remote-sensing instruments to confirm their nature, and if possible, their significance. This may involve exploratory removal of overburden.

Submerged Cultural Resources Study

A document that discusses, in detail, all known underwater archeological sites in a given park. This may involve test excavations. The intended audience is managerial and professional, not the general public.

Submerged Cultural Resources Site Report

Exhaustive documentation of one archeological site which may involve a partial or complete site excavation. The intended audience is primarily professional and incidentally managerial. Although the document may be useful to a park's interpretive specialists because of its information content, it would probably not be suitable for general distribution to park visitors.

Submerged Cultural Resources Special
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These may be in published or photocopy format. Included are special commentaries, papers on methodological or technical issues pertinent to underwater archeology, or any miscellaneous report that does not appropriately fit into one of the other categories.

Published Reports of the Southwest Cultural
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